

#### DEPARTMENT OF THE ARMY

U.S. ARMY CORPS OF ENGINEERS 720 E. Park Boulevard, Suite 245 Boise, Idaho 83712-7757

February 8, 2016

Regulatory Division

SUBJECT: NWW-2006-2300025-B02, ITD/US 20/26 Corridor Study

ITD Key No. 07826

Ms. Amy Schroeder Idaho Transportation Department Post Office Box 8028 Boise, Idaho 83707-2028

Dear Ms. Amy Schroeder:

Our preliminary jurisdictional determination (PJD) indicates the proposed US 20/26 Corridor Study project site may include Waters of the United States, including wetlands. The proposed project site is located on US 20/26 between the I 84 Junction in Caldwell, and the Eagle Road intersection in Eagle, within Sections 19, 23-26 & 30 of Township 4 North, Range 3 West, Sections 19-30 of Township 4 North, Range 2 West, Sections 19 – 30 of Township 4 North, Range 1 West, and within Sections 19 – 21, & 28 – 30 of Township 4 North, Range 1 East, near latitude 43° 39' 47.55" N and longitude - 116° 30' 46.51" W, in Canyon & Ada Counties, Idaho. Your request has been assigned file number NWW-2006-2300025-B02, which should be referred to in future correspondence with our office regarding this site.

Enclosed are two copies of the Preliminary Jurisdictional Determination Form and Figures 5.1 – 5.14, updated November 2015, entitled "Potentially Jurisdictional Wetlands/Waters of the U.S." showing the approximate boundaries that may be Water(s) of the U.S., including wetlands, for the subject corridor study project site. Please review the document and any attachments thereto. If you consent to jurisdiction as set forth, please sign both copies, return one copy to the Corps at the address in the above letterhead and keep the other copy for your records. This PJD shall remain in effect unless an approved jurisdictional determination is requested or new information supporting a revision is provided to this office.

Although this determination is advisory in nature and may not be appealed under the Corps of Engineers Administrative Appeal Procedures, as defined in 33 CFR 331, the enclosed *Notification of Administrative Appeal Options and Process Fact Sheet and Request for Appeal Form* (RFA) explains your options, if you do not agree with this determination.

#### **SECTION 404 WATER**

Section 404 of the Clean Water Act requires that a DA permit be obtained for the discharge of dredged and/or fill material into Waters of the U.S., including jurisdictional wetlands (33 U.S.C. 1344). Waters of the U.S. include most perennial and intermittent rivers and streams, natural and man-made lakes and ponds, as well as irrigation and drainage canals and ditches that are tributaries to other Waters, and wetlands. A Department of the Army (DA) authorization may be required if you propose to perform work or place dredged and/or fill material into waters or wetlands on the project site.

Further, the Corps defines wetlands as those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Discharges of dredged or fill material into these areas may include those associated with mechanized land-clearing involving vegetation removal with mechanized equipment such as front-end loaders, backhoes, or bulldozers with sheer blades, rakes, or discs in wetlands and excavation activities which result in the discharge of dredged material and destroy or degrade Waters of the United States.

Please be aware, this PJD treats all wetlands and Waters on the project site as Waters of the U.S. subject to Corps jurisdiction, and may be submitted with a permit application for computation of impacts and compensatory mitigation requirements.

This determination applies only to Department of the Army permitting jurisdiction and does not authorize any injury to property or excuse you from compliance with other Federal, State, or local statutes, ordinances, regulations, or requirements which may affect these areas, or work you would propose to conduct in these areas. Please obtain all required permits before starting work in the Waters or wetland areas identified on this project site.

#### **CUSTOMER SERVICE**

We actively use feedback to improve our delivery and provide you with the best possible service. Please take our online customer service survey to tell us how we are doing. Follow this link to take the survey:

http://corpsmapu.usace.army.mil/cm\_apex/f?p=regulatory\_survey. If you have questions or if you would like a paper copy of the survey, call our office at 208-433-4464. For more information about the Walla Walla District Regulatory program, visit us online at <a href="http://www.nww.usace.army.mil/BusinessWithUs/RegulatoryDivision.aspx">http://www.nww.usace.army.mil/BusinessWithUs/RegulatoryDivision.aspx</a>.

If you have any questions or need additional information about this permit, you can contact Ms. Nicholle Braspennickx at 208-433-4461, by mail at the address in the letterhead, or email at <a href="Micholle.M.Braspenn@usace.army.mil">Nicholle.M.Braspenn@usace.army.mil</a>. A copy of this letter is being sent to: Mr. Greg Vitley, Idaho Transportation Department, (ITD), District 3; and Ms. Sue Sullivan, ITD Headquarters.

Sincerely,

Kelly J. Urbanek

Chief, Regulatory Division

#### Enclosures:

Wetland/Waters Delineation Maps Figures 5.1 – 5.14 Prepared by Parametrix Preliminary Jurisdictional Determination Form Notification of Administrative Appeal Options and Request for Appeal Form

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## PRFI IMINARY JURISDICTIONAL DETERMINATION FORM

#### L BACKGROUND INFORMATION

A. Report completion date for Preliminary Jurisdictional Determination (PJD): 1/25/2016

B. Name/address of person requesting preliminary JD:

Ms. Amy Schroeder, Idaho Transportation Department, Post Office Box 8028, Boise, Idaho 83707-2028. Phone: 208-334-8302. <a href="mailto:Amy.Schroeder@itd.idaho.gov">Amy.Schroeder@itd.idaho.gov</a>

C. District Office: Walla Walla District

File Name: ITD/US 20/26, Corridor Study File Number: NWW-2006-2300025-B02

D. Project Location(s) and Background Information:

State: Idaho Counties: Canyon & Ada Cities: Caldwell, Eagle Center Coordinates of Site (lat/long in degree decimal format): Lat.: 43° 39' 47.55" North

Long.: -116° 30' 24.92" West

Universal Transverse Mercator: 11

Name of nearest waterbody(s): Phyllis Canal, Caldwell Canal, Fifteen Mile Creek, Mason

Creek, Noble Drain, unnamed canals, drains, ditches, and tributaries

Identify (estimate) amount of waters in the review area:

Non-wetland waters: 15.6 linear miles varies Width (ft) and/or acres

Cowardin Class: R4Cx - Riverine, intermittent, seasonal, excavated

Stream Flow: intermittent Wetlands: approx. 2.25 acres

Cowardin Class: emergent, scrub-shrub

Name of any water bodies on the site identified as Section 10 waters:

Tidal: N/A Non-Tidal: N/A

E.	Review performed for site evaluation	(Check all that Apply):
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Office (Desk) Determination Date: January 25, 2016 and February 4, 2016

Field Determination Date(s): March 27, 2008, July 13, 2010

- 1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site. The permit applicant or other affected person/party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for the site, as described above. Nevertheless, the permit applicant or other affected person/party who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.
- 2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "Pre-Construction Notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following:
  - (a) The permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters;
  - (b) That the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved

JD could possibly result in less compensatory mitigation being required or different special conditions;

- (c) That the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization;
- (d) That the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary;
- (e) That undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable;
- (f) Accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and
- (g) Whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable.
- 3. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein) or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable.

## II. SUPPORTING DATA. Data reviewed for Preliminary JD

This preliminary JD finds that there "may be" waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

Check all boxes below that apply. The checked information should be included in the administrative file. Provide detailed reference sources for each checked box.

Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: "US Highway 20/26 Corridor Preservation Study – Wetlands and Waters of the U.S Report," prepared by Parametrix, dated November 2015, Figures 1, and 5.1 – 5.14
<ul> <li>□ Data sheets prepared/submitted by or on behalf of the applicant/consultant</li> <li>□ Office concurs with data sheets/delineation report</li> <li>□ Office does not concur with data sheets/delineation report</li> <li>□ Data sheets prepared by the Corps:</li> <li>□ Corps navigable waters' study:</li> <li>□ U.S. Geological Survey Hydrologic Atlas:</li> <li>□ USGS NHD data</li> <li>□ USGS 8 and 12 digit HUC maps</li> </ul>

Middleton, Star, & Eagle
USDA Natural Resources Conservation Service Soil Survey, Citation:
☐ National wetlands inventory map(s): Cite name:
State/Local wetland inventory map(s):
FEMA/FIRM maps:
☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
☐ Photographs: ☐ Aerial (Name & Date): OR ☐ Other (Name & Date):
Previous determination(s): File no. and Date of Response Letter:
☑ Other information (please specify):

Fifteen Mile Creek and Mason Creek are perennial, relatively permanent waters (RPWs) which flow to the Boise River. The Boise River is another perennial RPW which flows to the Snake River, an interstate, Section 10, traditional navigable water of the U.S. Corps of Engineers regulations at 33 CFR Part 328.3(a)(5) assert Clean Water Act (CWA) jurisdiction over all tributaries to other waters of the U.S.

Phyllis Canal, Caldwell Canal, and other ditches, drains and unnamed irrigation canals delineated on-site are intermittent RPWs which flow to the Boise River. In <u>Headwaters, Inc. vs. Talent Irrigation District</u>, 243 F.3d 526 (9<sup>th</sup> Cir. 2001) the Ninth Circuit Court of Appeals held that irrigation canals that receive water from natural streams and lakes, and divert water to streams and creeks, are connected as "tributaries" to those other waters. "As tributaries, the canals are 'waters of the United States' and are subject to the CWA and its permit requirement." <u>Headwaters</u>. 243 F.3d at 533. Moreover, the court held that "Even tributaries that flow intermittently are 'waters of the United States.'" <u>Id</u>. at 534. Corps of Engineers regulations at 33 CFR Part 328.3(a)(5) assert CWA jurisdiction over tributaries to other waters of the U.S.

The delineated wetlands on-site are bordering and/or contiguous to delineated tributaries on-site, both natural and man-made. Corps of Engineers regulations at 33 CFR Part 328.3(a)(7) assert CWA jurisdiction over wetlands adjacent to waters of the United States.

Ponds 1, 3 and 4 may be jurisdictional waters of the U.S. per 33 CFR Part 328.3(a)(4) or other definition of waters of the United States.

This constitutes a preliminary jurisdictional determination (JD) and is useful for the planning of your project. An approved JD is not necessary in order for the Corps to process a 404 permit application.

Admin File No. NWW-2006-2300025-B02

Important Note: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

See Next Page for Required Signatures

Admin File No. NWW-2006-2300025-B02, ITD/US 20/26 Corridor Study, PJD

Required PJD Signatures

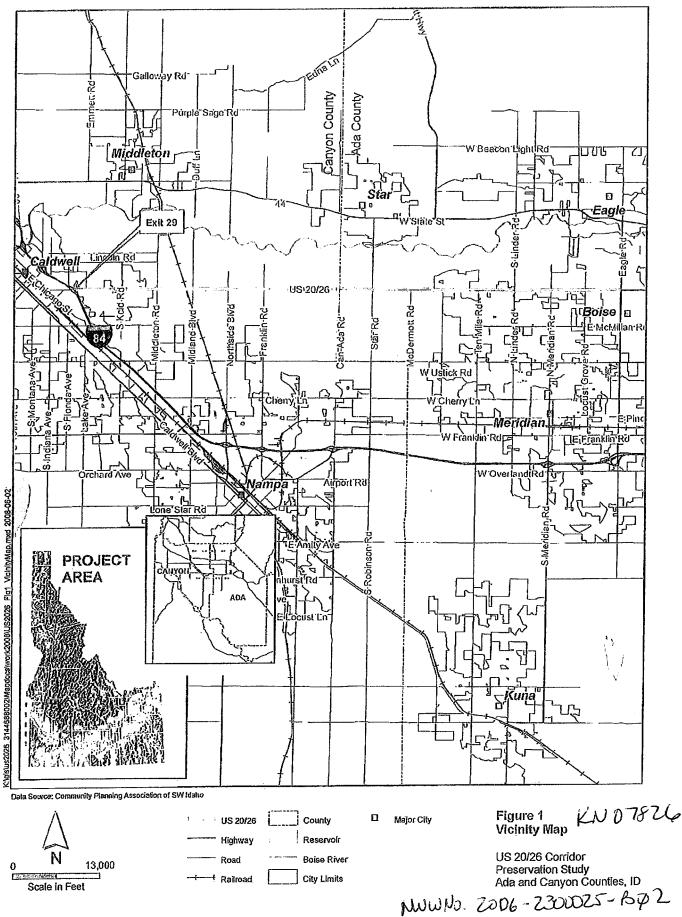
Signature of Regulatory Project Manager REQUIRED

Signature of person requesting Preliminary JD REQUIRED (unless obtaining signature is

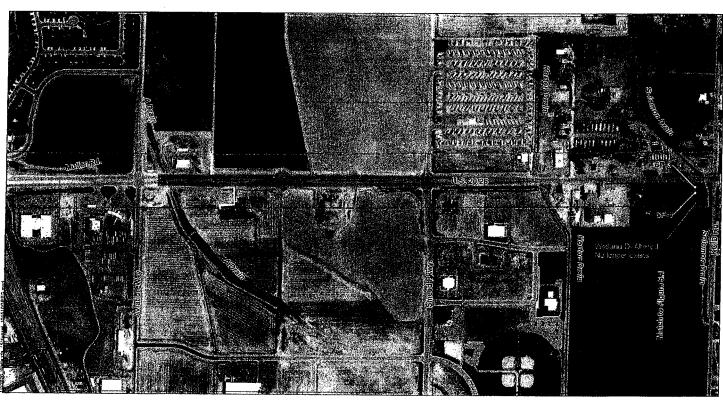
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Map Index

Potentially Jurisdictional Wetlands/Waters of the US

Key: 07826, US 20/26 Corridor Preservation Study Ada and Canyon Counties, ID

Source: Field visit, Oct 28, 2015

Figure 5.1

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Map Index

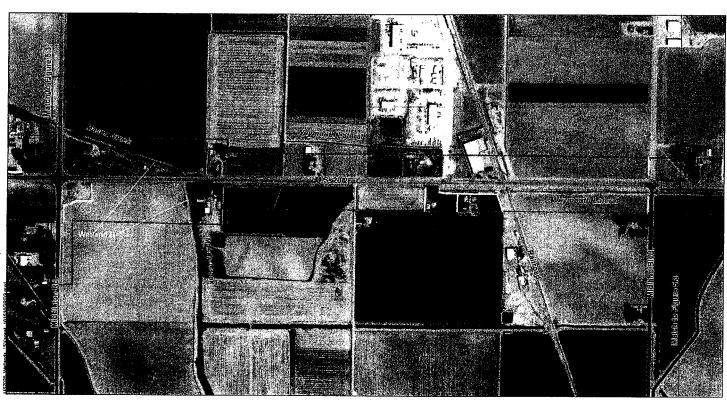
Potentially Jurisdictional Wetlands/Waters of the US

Key: 07826, US 20/26 Corridor Preservation Study Ada and Canyon Counties, ID

Source: Field visit, Oct 28, 2015

Figure 5.2

NWW No. 2006-2300025-B\$2



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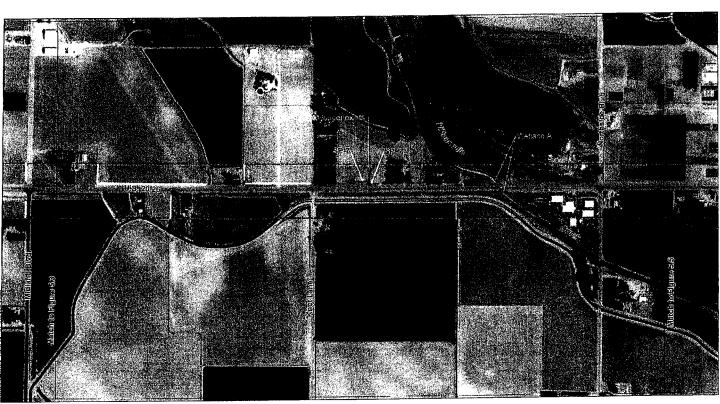
Potentially Jurisdictional Wetlands/Waters of the US

Key: 07826, US 20/26 Corridor Preservation Study Ada and Canyon Counties, ID

Source: Field visit, Oct 28, 2015

Figure 5.3

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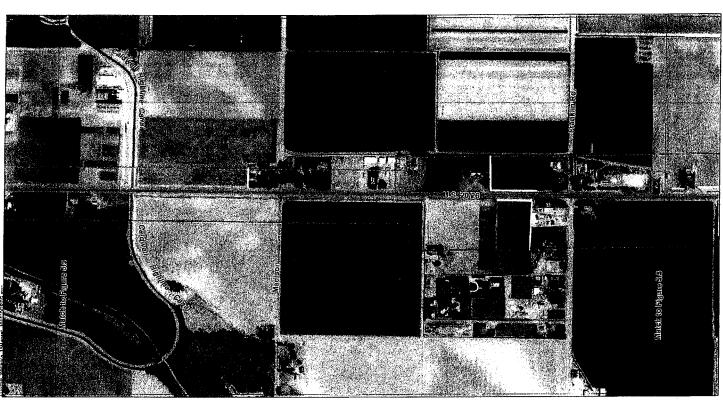
Potentially Jurisdictional Wetlands/Waters of the US

Key: 07826, US 20/26 Corridor Preservation Study Ada and Canyon Counties, ID

Source: Field visit, Oct 28, 2015

Figure 5.4

NWW NO. 2006-2300025-BJZ



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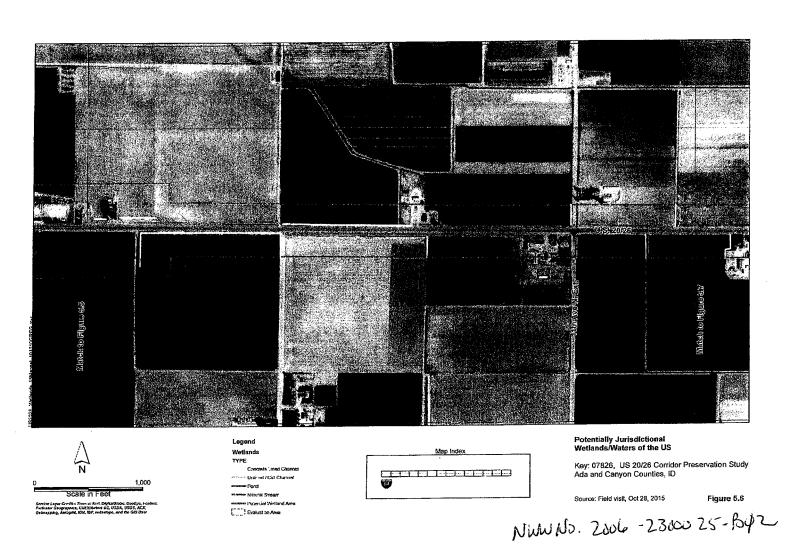
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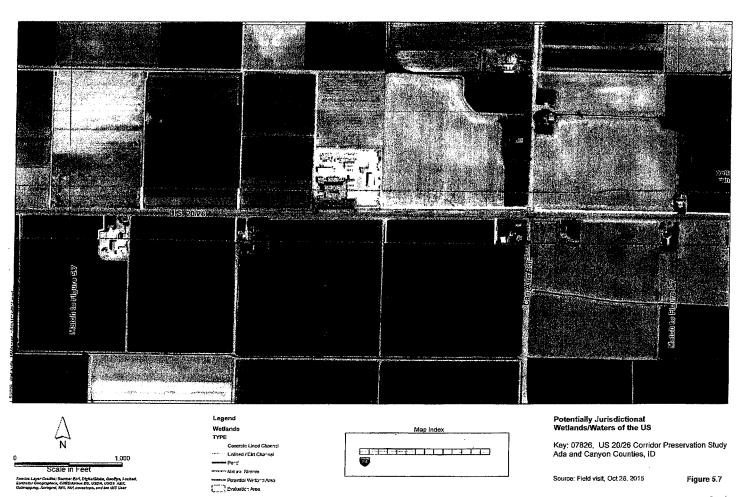
Key: 07826, US 20/26 Corridor Preservation Study Ada and Canyon Counties, ID

Source: Field visil, Oct 28, 2015

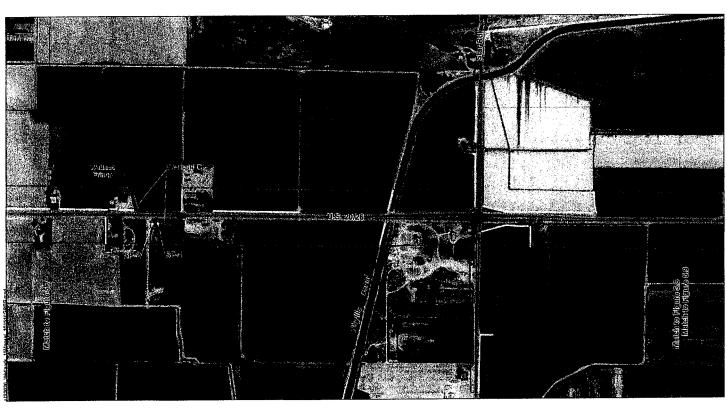
Figure 5.5

NWWNO. 2006-2300025-BJZ





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Map Index

Potentially Jurisdictional Wetlands/Waters of the US

Key: 07826, US 20/26 Corridor Preservation Study Ada and Canyon Counties, ID

Source: Field visit, Oct 28, 2015

Figure 5.8

NUM No. 2006-23000 25-BPZ



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Map Index

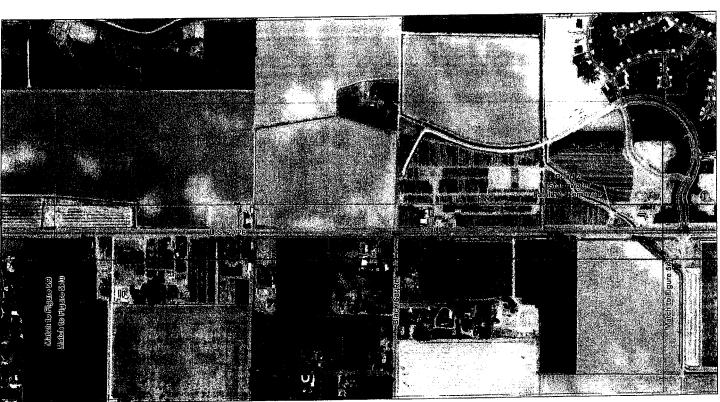
Potentially Jurisdictional Wetlands/Waters of the US

Key: 07826, US 20/26 Corridor Preservation Study Ada and Canyon Counties, ID

Source: Field visit, Oct 28, 2015

Figure 5.9

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Map Index

Potentially Jurisdictional Wetlands/Waters of the US

Key: 07826, US 20/26 Corridor Preservation Study Ada and Canyon Counties, ID

Source: Field visit, Oct 28, 2015

Figure 5.10

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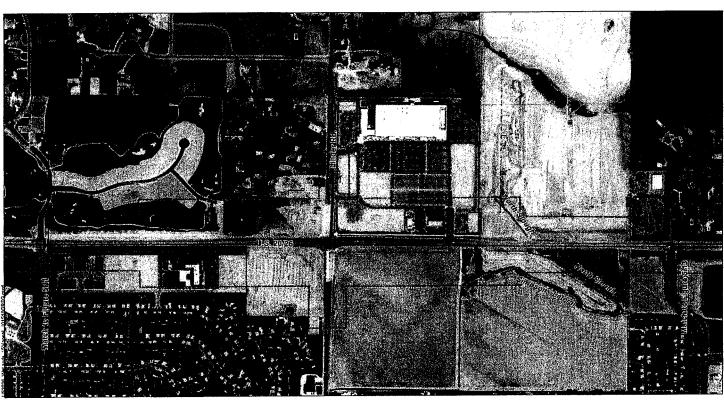
Potentially Jurisdictional Wetlands/Waters of the US

Key: 07826, US 20/26 Corridor Preservation Study Ada and Canyon Counties, ID

Source: Field visit, Oct 28, 2015

Figure 5.11

NUMNO. 2006-2300025-B42



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Map Index

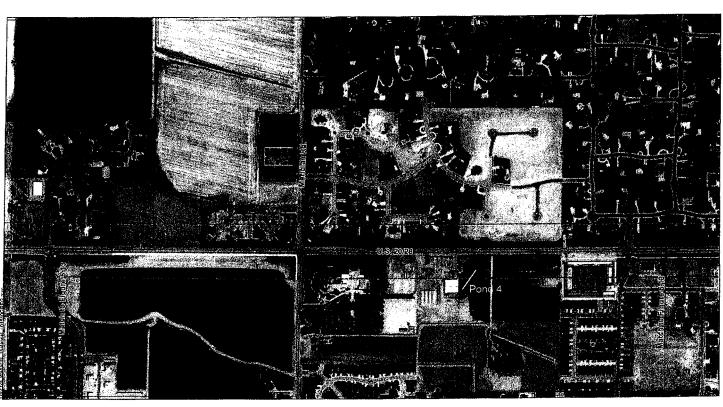
Potentially Jurisdictional Wetlands/Waters of the US

Key: 07826, US 20/26 Corridor Preservation Study Ada and Canyon Counties, ID

Source: Field visit, Oct 28, 2015

Figure 5.12

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Map Index

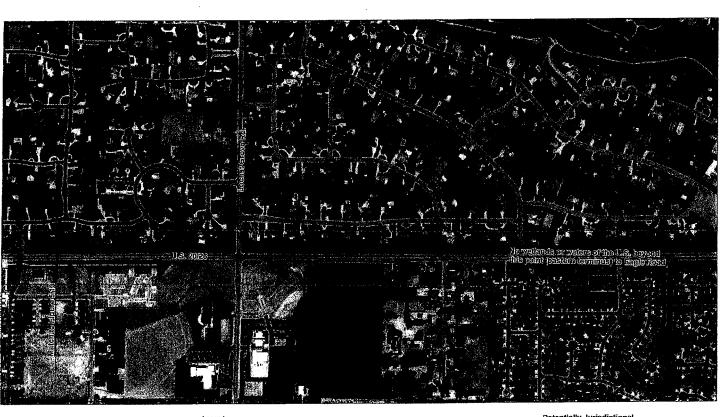
Potentially Jurisdictional Wetlands/Waters of the US

Key: 07826, US 20/26 Corridor Preservation Study Ada and Canyon Counties, ID

Source: Field visit, Oct 28, 2015

Figure 5.13

NWWNO. 2006-2300025-BPZ



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Map Index

Potentially Jurisdictional Wetlands/Waters of the US

Key: 07826, US 20/26 Corridor Preservation Study Ada and Canyon Counties, ID

Source: Field visit, Oct 28, 2015

Figure 5.14

Numbo. 2006-2300025-B42

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## NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

	cant: Idaho Transportation rtment	File Number: NWW No. 2006-2300025-B02 ITD Key No. 07826	Date: 2/8/16
Attacl	ned is:		See Section
			below
INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)			Α
PROFFERED PERMIT (Standard Permit or Letter of permission)			В
PERMIT DENIAL			С
APPROVED JURISDICTIONAL DETERMINATION			D
X PRELIMINARY JURISDICTIONAL DETERMINATION			<b>E</b>

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found in Corps regulations at 33 CFR Part 331, or at

http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/FederalRegulation.aspx

## A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer
  for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is
  authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in
  its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional
  determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

## B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer
  for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is
  authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in
  its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional
  determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINA or provide new information.	TION: You may accept or appeal the approved JD			
ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.				
<ul> <li>APPEAL: If you disagree with the approved JD, you mand Administrative Appeal Process by completing Section II.</li> <li>This form must be received by the division engineer with</li> </ul>	ay appeal the approved JD under the Corps of Engineers of this form and sending the form to the division engineer. nin 60 days of the date of this notice.			
regarding the preliminary JD. The Preliminary JD	IATION: You do not need to respond to the Corps is not appealable. If you wish, you may request			
an approved JD (which may be appealed), by con Also you may provide new information for further of	tacting the Corps district for further instruction. consideration by the Corps to reevaluate the JD.			
SECTION II - REQUEST FOR APPEAL or OBJECT	CTIONS TO AN INITIAL PROFFERED PERMIT			
REASONS FOR APPEAL OR OBJECTIONS: (De	scribe your reasons for appealing the decision or your ments. You may attach additional information to this form to			
•				
ADDITIONAL INCORMATION: The carred in limited to				
the record of the appeal conference or meeting, and any sup is needed to clarify the administrative record.  Neither the ap	iew of the administrative record, the Corps memorandum for plemental information that the review officer has determined pellant nor the Corps may add new information or analyses ion to clarify the location of information that is already in the			
POINT OF CONTACT FOR QUESTIONS OR INF				
If you have questions regarding this decision and/or the appeal process you may contact:	If you only have questions regarding the appeal process you may also contact:			
US Army Corps of Engineers, Walla Walla District Attn: Ms. Kelly J. Urbanek, Chief, Regulatory Division 720 E. Park Boulevard, Suite 245	US Army Corps of Engineers, Northwestern Division Attn: Mary Hoffman, Regulatory Appeals Review Officer P.O. Box 2870			
Boise, Idaho 83712-7757 Telephone: 208-433-4464 Kelly.J.Urbanek@usace.army.mil	Portland, OR 97208-2870 Telephone (503) 808-3888 Mary.J.Hoffman@usace.army.mil			
RIGHT OF ENTRY: Your signature below grants the right of government consultants, to conduct investigations of the projue provided a 15 day notice of any site investigation, and will	ect site during the course of the appeal process. You will			
, and will	Date: Telephone number:			
Signature of appellant or agent.				

# U.S. Highway 20/26 Corridor Preservation Study-Wetlands and Waters of the U.S. Report.

ITD Key No: 07826

Project No. STP-3230(106)

 $Prepared \ for$ 

**Idaho Transportation Department** 

8150 Chinden Blvd Boise, Idaho 83714

## WETLAND DELINEATION/DETERMINATION REPORT COVER FORM

Applicant Owner Name, Firm and Address:	Business phone #: 208.334.8300		
Idaho Transportation Department	Home phone # (optional):		
C/O Marc Danley, Project Manager District 3	FAX #: 208-334-8917		
8150 Chinden Blvd Boise, Idaho 83714	E-mail: Marc.Danley@itd.idaho.gov		
Authorized Legal Agent, Name and Address:	Business phone #:		
	FAX #:		
	E-mail:		
Project and Site Information			
Project Name: US Highway 20/26 Corridor Preservation Study	n Latitude: 43.663 Longitude: -116.498		
Proposed Use: Corridor Preservation/Road Widening	Tax Map #:		
Project Street Address (or other descriptive location):	Township: Range: 1E Sec:19,20,29,30		
US Highway 20/26 between Caldwell (Aviation Way) and Eagle (Eagle Road) (approximately 15 miles)	4N 1W-2W 19-30		
and Eagle (Eagle Road) (approximatory to miss)	3W 23-25		
	Tax Lot (s): numerous		
	Waterway: N/A River Mile: N/A		
City: Eagle to Caldwell County: Ada & Canyon	NWI Quad(s): Star, Middleton, Eagle		
Wetland Determination Information			
Wetland Consultant Name, Firm and Address:	Phone #: 503.233.2400		
Colin MacLaren	FAX #: 503.233.4825		
Parametrix 700 NE Multnomah, Suite 1000	E-mail address:		
Portland, OR 97232	cmaclaren@parametrix.com		
	1		
_			
Primary Contact for report review and site access is	Consultant ⊠ Applicant/Owner ☐ Authorized Agent		
Wetland/Waters Present?	ll Wetland Acreage: 2.50 acres in the study area		
Determination Purpose:			
R-F permit application submitted with delineation	Sale, purchase, lease etc.		
☐ Mitigation bank site	Partition, re-plat, lot line adjustment		
☐ Industrial Land Certification Program site	☐ Habitat restoration project		
R-F application will be submitted within 90 days	Other: Transp. Corridor preservation		
Other Information:	N. N.		
Other information.	Y N		
Has previous delineation/application been made on parcel?	Y N  ☐ ☑ If known, date of previous study:		

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#### WETLAND DETERMINATION SUMMARY

Study Area Name: US Highway 20/26 Corridor Preservation Study.

**Location:** Canyon and Ada Counties:, Township 4 North, Range 1 East, Sections 19-20; Township 4 North Range 1 West, Sections 19-30; Township 4 North, Range 2 West, Sections 19-30; and Township 4 North, Range 3 West, Sections 23-26.

**Study Area:** The study area is a 600-foot wide corridor that straddles US Highway 20/26 which widens to 700 feet at potential interchange locations at Linder and Franklin Roads (it also widens to 700 feet at Middleton and McDermott Roads because at the time of the wetland investigation there was potential for interchanges at these locations).

Owner: Multiple owners.

**Methods:** Potentially jurisdictional wetlands and waters of the United States (US) were identified using the "Arid West Interim Regional Supplement" of the US Army Corps of Engineers (Corps) Wetlands Delineation Manual (Environmental Laboratory 2006).

**Hydrology:** Hydrology at the wetland sites is mainly from surface flow originating from two streams and leakage from numerous irrigation canals and laterals within the study area. Approximately 0.22 inches of rain fell during the three weeks prior to the start of wetland determination work in May 2007 and approximately 0.01inches of rain fell in September of 2010 prior to wetland determination work in October 2010 (National Weather Service – Climate Data).

**Soils:** One hydric soil unit, Moulton fine sandy loam, is mapped for the study area. Several non-hydric soil units may have hydric soils inclusions. Soils within potentially jurisdictional wetlands exhibited chroma values ranging from two (2) to three (3).

**Vegetation:** Dominant vegetation within the wetlands includes a variety of herbaceous species, including reed canarygrass (*Phalaris arundinacea*, FACW), cattail (*Typha latifolia*, OBL), and tall fescue (*Festuca arundinacea*). Areas adjacent to canals and stream channels support stands of willow (*Salix* sp.), cottonwood (*Populus balsamifera*, FAC), and black locust (*Robinia pseudo-acacia*, FACU). Dominant vegetation in upland areas consists of a variety of weedy, non-hydrophytes including cheatgrass (*Bromus tectorum*, UPL), orchardgrass (*Dactylis glomerata*, FACU), and Italian ryegrass (*Lolium multiflorum*, FACU). A clear distinction between hydrophytic and non-hydrophytic species is common and apparent throughout the study area.

Project Staff: Colin MacLaren, Tina Farrelly, and Gary Maynard, Parametrix. Greg Vitley, ITD.

**Field Dates:** May 10 and 11, 2007, March 27, 2008, July 13, 2010, October 1, 2010 and October 28, 2015.

**Determination:** Numerous streams and irrigation canals, laterals, and seven features that fall within the study area were determined to be potentially jurisdictional wetlands/waters of the US. In addition, three manmade ponds within the study area were determined to be potentially jurisdictional; investigations as to the connectivity of three of the pond features were in-determinant. Two of the wetland features are associated with creeks, which consist of nearly level, vegetated riparian benches along Fifteenmile and Mason creeks. These two riparian wetlands include limited tree and shrub overstory with a reed canarygrass-dominant understory. The other two wetlands are palustrine emergent wetlands, which have been affected by livestock grazing or agriculture and are supported by leakage from irrigation features and ponding.

**Functional Capacity:** Three functional capacity evaluations were made for: 1) manmade canals and ditches; 2) naturally-occurring streams; and 3) wetlands. The overall condition of potentially jurisdictional wetlands, manmade waterways, and stream channels in the study area is poor, based on an evaluation using the Montana Department of Environmental Quality Rapid Assessment Method. The wetland area and streams are disturbed and support a nuisance plant population (reed canarygrass) but

have potential for recovery; the irrigation canals are maintained and are located in an urbanized setting; thus, current biologic functions are diminished and the potential for significant enhancement is limited. See APPENDIX C.

## 1. INTRODUCTION

The Idaho Transportation Department (ITD) is conducting a corridor preservation study for a 15-mile segment of US Highway 20/26 (US 20/26) in Ada and Canyon Counties. The purpose of the study is to retain and preserve road right-of-way for anticipated improvements to US 20/26. This report assesses the wetland presence or absence of potentially jurisdictional wetlands/waters of the United States within the potential project corridor (Figure 1).

The section of US 20/26 that is being studied connects the cities of Caldwell, Meridian, Eagle, and Boise and the Urban Areas of Impact for the cities of Nampa and Star (areas experiencing or will be experiencing development pressure as defined in the respective comprehensive plans). The study area is centered along US 20/26, beginning at Aviation Way near the US 20/26 and Interstate 84 interchange in Caldwell, and extending east about 15 miles to Eagle Road (State Highway 55) in Ada County. Potential future improvements may include additional travel lanes and access management options including new interchanges.

On May 10 and 11, 2007, Parametrix staff performed field studies to document the presence or absence of potential jurisdictional wetlands and waterways within the project area, and to assess the functions of existing wetland and waterway features. Supplemental field investigations were conducted March 27, 2008 and July 13, 2010 with Greg Vitley, ITD District 3 Environmental Planner, and Nicholle Braspennickx, US Army Corps of Engineers (Corps) Regulatory Project Manager, to verify and update preliminary field studies and wetland determinations. An additional wetland investigation was completed by Parametrix on October 1, 2010 as a result of the July 13, 2010 field reconnaissance, which indicated a need to reassess the changes to irrigation drainage features and wetlands since 2007. Greg Vitley did a field review to update this report on October 28, 2015. It was determined that Wetland D and E, and Pond 2 no longer exist among several changes in the irrigation facilities.

## 2. SITE DESCRIPTION AND HISTORY

The site is located in T4N, Ranges 1E to 3W, Sections 19 to 30 (see Figures 1 and 2; all figures are found in Appendix A). The linear study area follows the alignment of US 20/26 for approximately 15 miles, and extends a minimum of 300 feet from the centerline of the highway (Figure 2). Primary land use at the site is agriculture, with surrounding properties undergoing urbanization as evident from recent subdivision development, especially in eastern portions of the study area.

Manmade irrigation canals, two streams, and two potentially jurisdictional wetlands were identified within the study area. Not all canals had surface waters present during field work, but all that were identified as potentially jurisdictional showed evidence of recent usage.

## 3. METHODS

Prior to field investigation, Parametrix staff reviewed available environmental data for the site. This included an examination of topographic maps, aerial photographs, the Soil Survey of Ada County Area, Idaho (Natural Resources Conservation Service [NRCS] 1980, Figure 3), Soil Survey for Canyon County Area, Idaho (NRCS 1985), and National Wetland Inventory (NWI) maps (US Fish and Wildlife Service [USFWS] 1981, Figure 4). NWI maps for the site are the Star, Middleton, and Eagle quadrangles.

The delineations were conducted pursuant to the parameters detailed in the Corps' Interim Regional Supplement to the Corps Wetland Delineation Manual: Arid West Region (Environmental Laboratory, 2006). The 1987 manual and Arid West supplement require evidence of three parameters in order to determine that a wetland occurs on a site: wetland hydrology, hydric soils, and hydrophytic vegetation.

The information collected during the site visit was recorded on supplemental Arid West wetland determination data forms and is included in Appendix B.

Due to the well-defined boundaries of the numerous canals, ditches and laterals located within the study area, those areas were mapped using aerial interpretation, and then field verified. Wetland areas were field verified using standard methods and disturbed site methods described in the 1987 Manual.

#### 3.1 VEGETATION

For an area to be classified as a wetland, a majority of the dominant plant species identified must be hydrophytes, that is, plants adapted to life in saturated soil conditions. In the National List of Plant Species that Occur in Wetlands: 1988 National Summary and 1993 Supplement: Northwest (Region 9) (Reed 1988, 1993), plant species are categorized according to their likelihood of occurring in wetlands. The categories include obligate (OBL), facultative wetland (FACW), facultative (FAC), facultative upland (FACU), or upland (UPL). If more than 50 percent of the dominant plant species are OBL, FACW, or FAC, the vegetation is considered to be hydrophytic.

#### 3.2 SOILS

The 1987 manual defines wetland soil as soil that is "...saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic vegetation." Acceptable field evidence of non-sandy mineral wetland soils includes gleying, soils with a chroma of 1, and soils with a chroma of 2 with mottling. Chroma is the intensity of a color and a low chroma indicates that the soil has been exposed to reducing conditions. Mottling of the soil indicates a fluctuating water table that allows the soil to become oxidized for parts of the growing season. In addition, the soil surveys of Ada and Canyon County were consulted to determine soil types potentially present within the project area. To establish the wetland boundaries, profiles of soil pits (at least 12 inches deep, except where the ground was too hard to dig) were inspected upland of the wetland and within the wetland itself. The soil texture, matrix color, and presence of mottles or gleying were recorded in the wetland determination data forms (Appendix B).

#### 3.3 HYDROLOGY

Wetland hydrology, as defined in the 1987 manual, must be...

"inundated or saturated by water to the surface for at least 5 percent of the growing season. Areas that are inundated or saturated to the surface for 5 to 12.5 percent of the growing season may meet the requirement for wetland hydrology if other positive indicators are present. Areas that are inundated or saturated to the surface for more than 12.5 percent of the growing season always have wetland hydrology."

The hydrology of the site was documented by recording the presence or absence of surface water, depth to the water table, saturation, and evidence of inundation (drainage patterns and oxidized root channels) at each soil pit sample plot. At the time of the site visits, wetland hydrology was present.

## 4. RESULTS

The following section describes current on-site conditions, based on a review of existing data and field visits.

#### **4.1 DATA REVIEW**

## 4.1.1 Soil Survey

Thirteen soil series are mapped by the NRCS as occurring on-site (Figure 3). Of the 13 soil series, Moulton fine sandy loam is the only hydric soil identified by NRCS soil surveys within the project area. Moulton fine sandy loam is mapped in the vicinity of South Eagle Road.

Moulton soils are deep and poorly-drained, formed in acid igneous alluvium on low alluvial terraces adjacent to the Boise River flood plain. Slope ranges from 0 to 2 percent. The elevation is 2,500 to 2,900 feet. The average annual precipitation is 11 inches. Typically, the surface layer is grayish brown, fine sandy loam about 12 inches thick. The subsoil is light brownish, gray, fine sandy loam about 12 inches thick. Permeability is moderately rapid, and runoff is typically ponded to slow.

Soils mapped within the study area include the following, with soils mapping unit in (parentheses):

- Abo silt loam (1)
- Aeric Haplaquepts (5)
- Blalock loam (Bd)
- Draper loam (Dr)
- Moulton loam (My)
- Moulton loam, saline (Mw)
- Moulton fine sandy loam<sup>1</sup> (111)
- Oliaga loam (Og)
- Power silt loam (Ph, 129)
- Power-Purdam complex (Pp, 144)
- Purdam silt (Pr)
- Purdam silt loam (141)
- Xerollic Haplargids (198).

## 4.1.2 National Wetland Inventory (NWI)

The site falls within the Star, Middleton, and Eagle, Idaho NWI 7.5' USGS quadrangle maps, which are at a scale of 1:24,000. Two wetlands are mapped by the NWI within the study area (Figure 4). One is located near Northside Boulevard and is associated with Fifteenmile Creek (see Appendix A, Figure 5.4). The other is located east of Franklin Road and north of US 20/26. No water feature or wetlands were

<sup>&</sup>lt;sup>1</sup> Hydric soil unit.

found at or in the vicinity of the NWI-mapped wetland near Franklin Road (Figure 4 and Appendix A, Figure 5.6).

## 4.1.3 Precipitation

Precipitation from April 22 through May 9, 2007 was 0.22 inches, recorded at the Boise weather station. No rain fell during field work. The total precipitation recorded for calendar year 2007 was 3.03 inches, a departure of -2.57 from the normal 5.60 inches (National Weather Service 2007). No measurable precipitation fell in the three weeks prior to the October 1, 2010 fieldwork (0.01 inches of rain were recorded in September 2010).

#### 4.2 FIELD EVALUATION

## 4.2.1 Vegetation

Vegetation within the project area is highly disturbed by agriculture, residential development, irrigation ditch construction, roadside and ditch maintenance, landscaping, and any number of typical land uses adjacent to a major thoroughfare. Along and in the vicinity of canals, laterals, drainages, and other wet areas, vegetation is mostly herbaceous, with some tree species along the shorelines of Fifteenmile and Mason Creeks. Table 1 lists some of the plant species common to the project area.

Table 1. Plant Species Observed at the US 20/26 Project Area

Latin Name	Common Name	Wetland Indicator Status
Agropyron repens	Quackgrass	FAC
Anthemis cotula	Stinking daisy	FACU
Bidens sp. (prob. B. cernua)	Bedstraw	FACW
Brassica campestris	mustard	UPL
Bromus tectorum	Cheatgrass	UPL
Cichorium intybus	Chickory	UPL
Cirsium arvense	Canada thistle	FACU
Cirsium undulatum	Wavy-leaf thistle	FACU
Cirsium vulgare	Bull thistle	FACU
Echinochloa crus-galli	Barnyardgrass	FACW
Festuca arundinacea	Tall fescue	FAC
Grindelia squarrosa	Hook-headed grindelia	FACU
Heracleum lanatum	Cow parsnip	FAC
Hypericum perforatum	St. John's wort	UPL
Lactuca serriola	Prickly lettuce	FACU
Lolium multiflorum	Italian ryegrass	FACU
Meilotus alba	White sweetclover	FACU
Phalaris arundinacea	Reed canarygrass	FACW
Poa bulbosa	Bulbous bluegrass	NOL
Polygonum hydropiper	Marshpepper smartweed	OBL
Polygonum persicaria	Spotted lady's thumb	FACW
Polypogon monspeliensis	Rabbitfoot grass	FACW
Populus balsamifera	Cottonwood	FAC
Robinia pseudo-acacia	Black locust	FACU
Rumex acetosella	Sheep sorrel	FACU
Sagittaria latifolia	Wapato	OBL

Latin Name	Common Name	Wetland Indicator Status
Salix spp.	Willow	(prob. FAC or wetter)
Tanacetum vulgare	Tansy	NI
Tragopogon dubius	Goatsbeard	UPL
Trifolium repens	White clover	FAC
Typha latifolia	Cattail	OBL

Source: Parametrix 2010.

Dominant vegetation in Wetland A along Fifteenmile Creek includes cottonwood and willow with an understory of reed canarygrass, spotted lady's thumb, and bedstraw (Appendix A, Figure 5.3). Dominant vegetation in Wetland B along Mason Creek consists of cottonwood, willow, and black locust with an understory of reed canarygrass. Adjacent uplands are primarily cheatgrass and Italian ryegrass.

The dominant vegetation community in wetland areas C is pasture, comprised of mainly tall fescue, ryegrass, and reed canarygrass. Wetland area F includes significant cow parsnip and lance-leaf plantain with scattered bentgrass. Upland vegetation is typical of disturbed areas; opportunistic weedy species such as cheatgrass, prickly lettuce, tansy, and mustard species are common. Wetlands D and E no longer exist due to lack of hydrophilic vegetation.

Vegetation communities vary widely between the four pond features. Pond 1 includes wapato and reed canarygrass. Ponds 3 and 4 are landscaped with groomed lawns and non-native trees and shrubs. Pond 2 no longer exists.

#### **4.2.2 Soils**

One hydric soil is mapped in the study area: Moulton fine sandy loam. This soil is mapped near Eagle Road, north of US 20/26. No soils profiles were recorded in this area. Soils recorded in a low-lying area west of Phyllis Canal showed evidence of hydric (Sampling Point [SP]-1) and non-hydric (SP-2) characteristics. Soils in SP-1 lacked structure and appeared primarily to be recently deposited silty alluvium with fine and coarse sands. These soils appeared to be located entirely below the ordinary high water elevation of an adjacent, unlined irrigation ditch. Soils in the adjacent upland sample plot were similar in structure and color but lacked sand as a major component.

Soils in other areas vary from gravelly loams to fine silty loams in both wetland and non-wetland areas. Hydric soils in these wetland areas include redoximorphic features and low chroma. These characters contrasted with adjacent, non-hydric soils, which typically lacked redox features and/or displayed higher chroma.

## 4.2.3 Hydrology

The sources of hydrology in the canals, laterals, and irrigation ditches are various and complex. In general, waters conveyed by these features originate from, and drain to, the Boise River located approximately one mile to the north. Hydrology in Wetland A (Fifteenmile Creek) west of Northside Boulevard appears to be fed by surface and subsurface waters conveyed/released by an adjacent, unnamed irrigation ditch. Hydrology in Wetland B (Mason Creek) appears primarily derived from a near-surface aquifer and potentially from contributing subsurface (hyporheic) waters from an unlined canal located adjacent to the east.

Wetland hydrology at all other wetlands (C and F) appear influenced, at least in part, by nearby or adjacent irrigation canals, laterals, or ditches. Both of these wetlands appear hydrologically connected to the irrigation infrastructure that directly links to the Boise River. In the October 2015 field review it was determined that Wetland D and E no longer exist.

Hydrology for Pond 1 is driven by contributing flow from an irrigation ditch to the east. This irrigation ditch is connected to the regional irrigation complex. Pond 2 was not existent during the November 2015 fieldwork.

Ponds 3 and 4 are aesthetic landscape features fed directly by piped water. Both include piped outfall/overflow structures. Connections of these outfalls to other waters of the US could not be field verified in October.

#### 5. WETLAND DETERMINATION

Wetland areas were identified associated with Fifteenmile Creek (Wetland A)(Appendix C, photographs 1 and 2) and Mason Creek (Wetland B)(Appendix C, photographs 3 and 4)(Appendix A, Figures 5.4 and 5.3, respectively). These features are vegetated riparian shorelines that appear to be flooded occasionally. Hydrology is likely driven by surface and hyporheic flows from the adjacent stream channels. Wetland A and B make up a total of approximately 1.74 acres of wetland within the study area (i.e., the entire right-of-way). At Wetland A, there are 0.57 acres of wetland located north of US 20/26 and 0.31 acres of wetland located south of the highway. At Wetland B, there are 0.70 acres of wetland located north of the highway and 0.16 acres located to the south.

Fifteenmile and Mason Creeks are natural streams and are thus jurisdictional waterways. Both are altered by channel straightening and armoring, and by vegetation clearing and landscaping throughout the study area. Consequently, the narrow riparian wetlands described above serve as valuable remnant habitat. Fifteenmile Creek retains marginal shade from mature trees along its banks. Shade is minimal along Mason Creek. Substrates in both consist of silts with limited gravels and cobbles. Neither stream appears connected to its historic floodplain.

Wetland C (Appendix A, Figure 5.8) is an approximately 0.60 acre palustrine emergent wetland located on either side of US 20-26 along a north-south oriented canal. Habitat functions for this wetland are affected by livestock grazing and manipulation of water levels.

Wetland D (Appendix A, Figure 5.2 and Appendix C, photographs 5 and 6) was a palustrine emergent, reed canarygrass-dominant feature measuring approximately 0.21 acres within the study area. A field visit in October 2015 determined this wetland no longer exists due to lack of vegetation. See photos in Appendix C. This feature extended outside the study area to the south. Grazing affected habitat functions of this feature.

Wetland E (Appendix A, Figure 5.4 and Appendix C, photographs 7 and 8) was a palustrine emergent wet pasture heavily affected by livestock grazing. A field visit in October 2015 determined this wetland no longer exists due to lack of wetland vegetation. See photos in Appendix C. Hydrology for this feature appeared to be heavily influenced by an irrigation ditch upslope to the north. Approximately 0.45 acres of this feature was located within the study area; the wetland extended north outside the study area to the edge of the irrigation ditch.

Wetland F (Appendix A, Figure 5.9 and Appendix C, photograph 9) is a small, triangularly shaped palustrine emergent wetland. A high percentage (~30%) of bare ground at this wetland and surrounding area appear due to grazing. Wetland F is approximately 0.16 acres in area.

Canals, laterals, and other irrigation features identified as potentially jurisdictional waterways were designated as such based on their ability to convey pollutants to navigable waters. The Corps considers man-made watercourses, such as canals, jurisdictional waters of the US if the watercourse provides a means of conveying contaminants or pollutants to waters of the US. In this area, the Boise River is both the primary source and the eventual outfall destination of waters in the irrigation channels.

Habitat functions associated with the unlined irrigation channels are confined within their banks. For those channels with extended periods of inundation, hydrophytic vegetation occurs at the water line

extending to near top of bank. Other unlined channels appear to be flooded less frequently, thus hydrophytic vegetation concentrates near the base of the channel prism. Vegetation is cleared from some of the unlined irrigation channels as a maintenance practice by the irrigation districts or property owners, thus the hydrologic regime was more difficult to determine. The concrete lined canals have minimal wetland function, serving as surface water conduits only. Approximately 5.9 miles of the 15.6 miles of irrigation channels within the study area are concrete lined.

Three manmade ponds/landscaped surface water features (Ponds 1, 3 and 4, Appendix C, photographs 10-12) were noted during field work. Pond 1 (Appendix A, Figure 5.10) appears to be jurisdictional based on its connectivity to surface irrigation features and is approximately 0.14 acres in size. The other two ponds (Appendix A, Figures 5.11 and 5.13) may not be jurisdictional based on evidence that none appear to have free and open connection to wetlands or potentially jurisdictional waterways. Ponds 3 and 4 are 0.40, and 0.29 acres in size, respectively. Pond 2 no longer exists. See photos in Appendix C.

The Corps is ultimately responsible for final jurisdictional determination on all wetlands/waters of the United States identified in this study. This study is for the purpose of a Preliminary Jurisdictional Determination.

### 6. FUNCTIONAL CAPACITY OF WETLANDS

#### 6.1 MONTANA RAPID ASSESSMENT METHODOLOGY

The existing habitat was assessed to evaluate the functional capacity of the riparian/wetland system using the Montana Wetland Rapid Assessment Method Guidebook (Apfelbeck 2005). The wetland area, canals, and two streams were evaluated separately due to their dissimilar nature.

Table 2 lists the results from the functional evaluation. Overall, the wetland and waterways function poorly. Assessment forms are included in Appendix C.

Wetland Function – Summary of Ratings	Wetlands	Canals (Riverine)	Streams (Riverine)
Hydrogeomorphic Condition Index	0.20	0.50	0.27
Vegetation Condition Index	0.63	0.40	0.62
Water Quality Condition Index	-	0.75	0.75
Buffer Condition/Stressor Score	0.23	0.10	0.10
Wetland Impact Score	0.42	0.51	0.51
Overall Score	0.38	0.44	0.46
Overall Condition	Poor	Poor	Poor

Table 2. Results of HGM Evaluation, Rapid Assessment Method

#### 7. CONCLUSION

The project area contains two riparian wetlands, two palustrine emergent wetlands, and three manmade open water features totaling approximately 3.33 acres. The project area also includes potentially jurisdictional irrigation canals, ditches and laterals. The two riparian wetland areas are associated with, and adjacent to, Mason Creek and Fifteenmile Creek. Riparian vegetation in these areas is the most intact habitat within the study area. These areas are found at the bottom of embankments confining both streams and appear subject to infrequent flooding.

It is estimated that the proposed widening of US 20/26 would impact approximately 0.24 acres of Wetland A and 0.22 acres of Wetland B for a total impact of 0.46 acres for the two riparian wetlands. The project will impact approximately 0.39, and 0.16 acres of Wetlands C and F, respectively. Wetlands D and E no longer exist. It was assumed that all three pond areas would also be impacted for a total impact to the ponds of 0.83 acres. The total combined estimated wetland impact would be 1.01 acres.

Manmade irrigation channels intersecting the study area may also be jurisdictional based on their connectivity to other jurisdictional waters. The total irrigation channel length within the study area is 15.6 miles. Pond 1 (Appendix A, Figure 5.10) has an open and evident connection to adjacent irrigation ditches, and is therefore likely a jurisdictional feature. Evidence that Ponds 3 and 4 maintain direct connections to jurisdictional waters could not be verified, and are assumed to be jurisdictional.

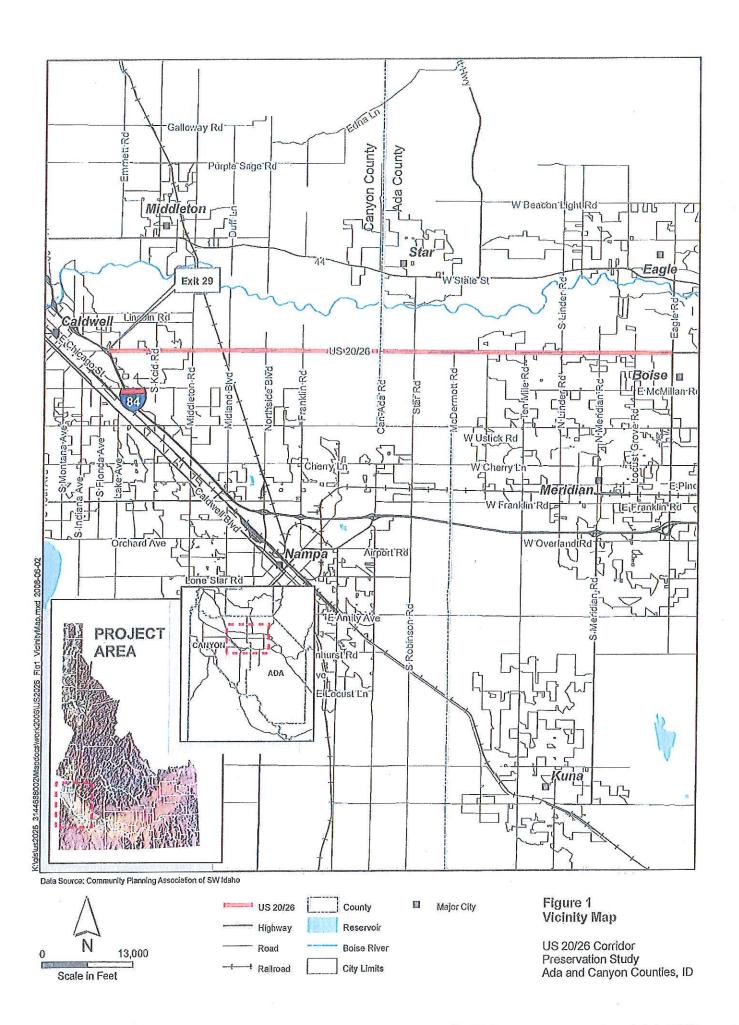
This report documents the investigation, best professional judgment and conclusions of the investigators.

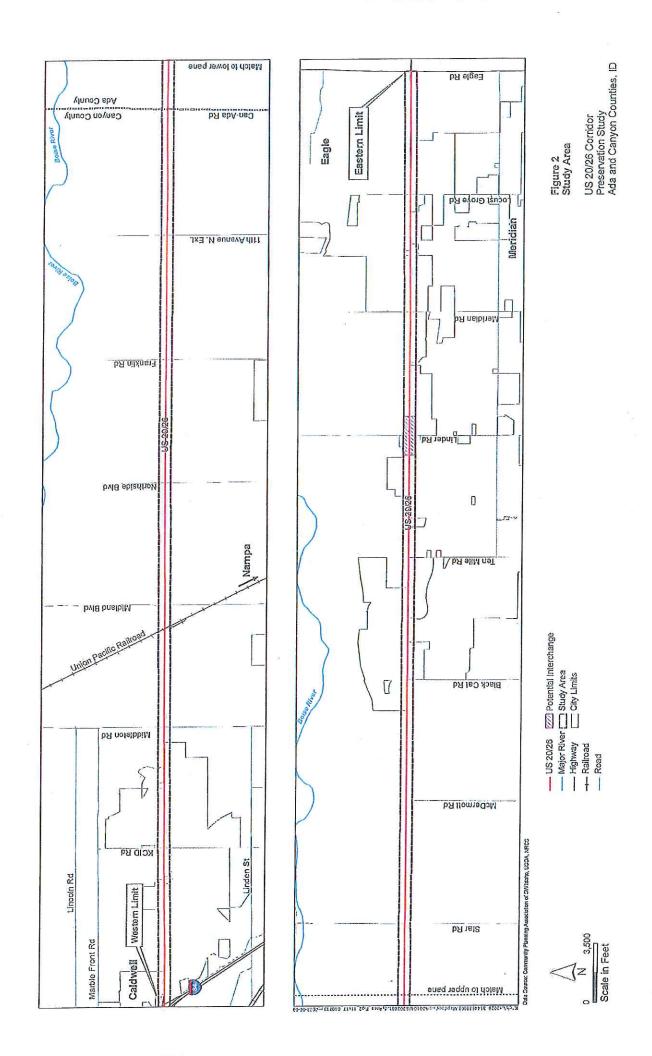
#### 8. REFERENCES

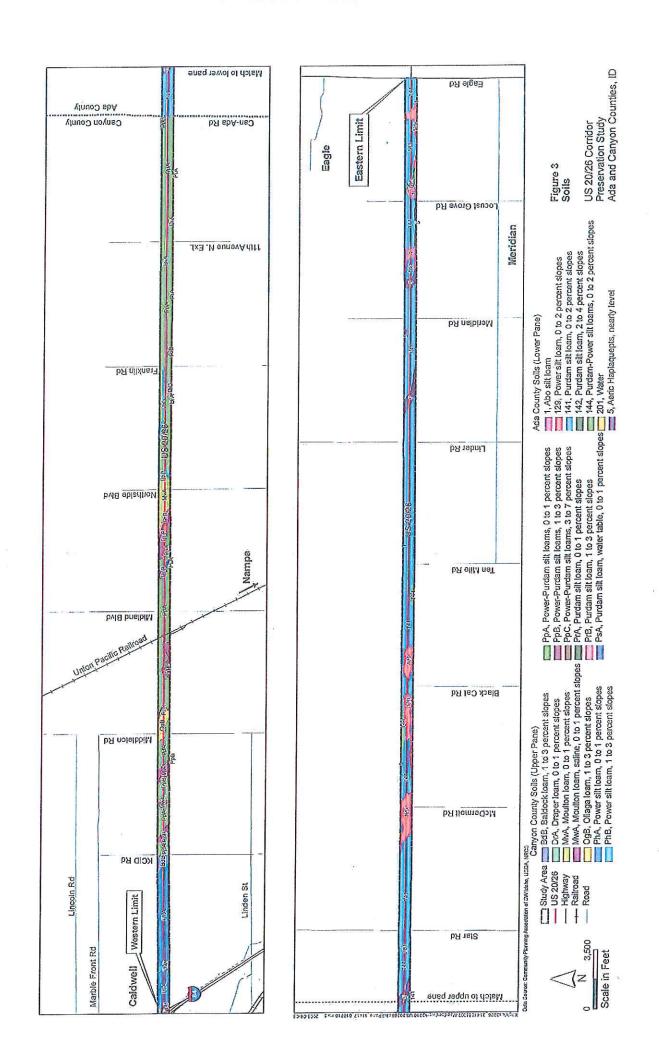
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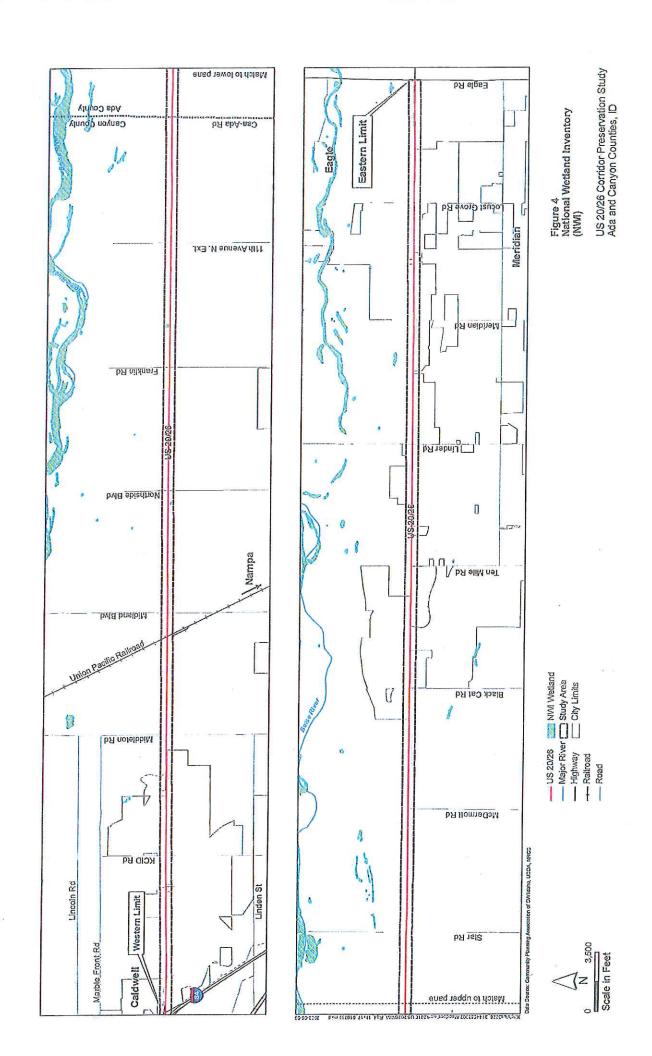
U.S. Highway 20/26 corridor Preservation Study, Wetlands and Waters of the U.S. Report Idaho Transportation Department

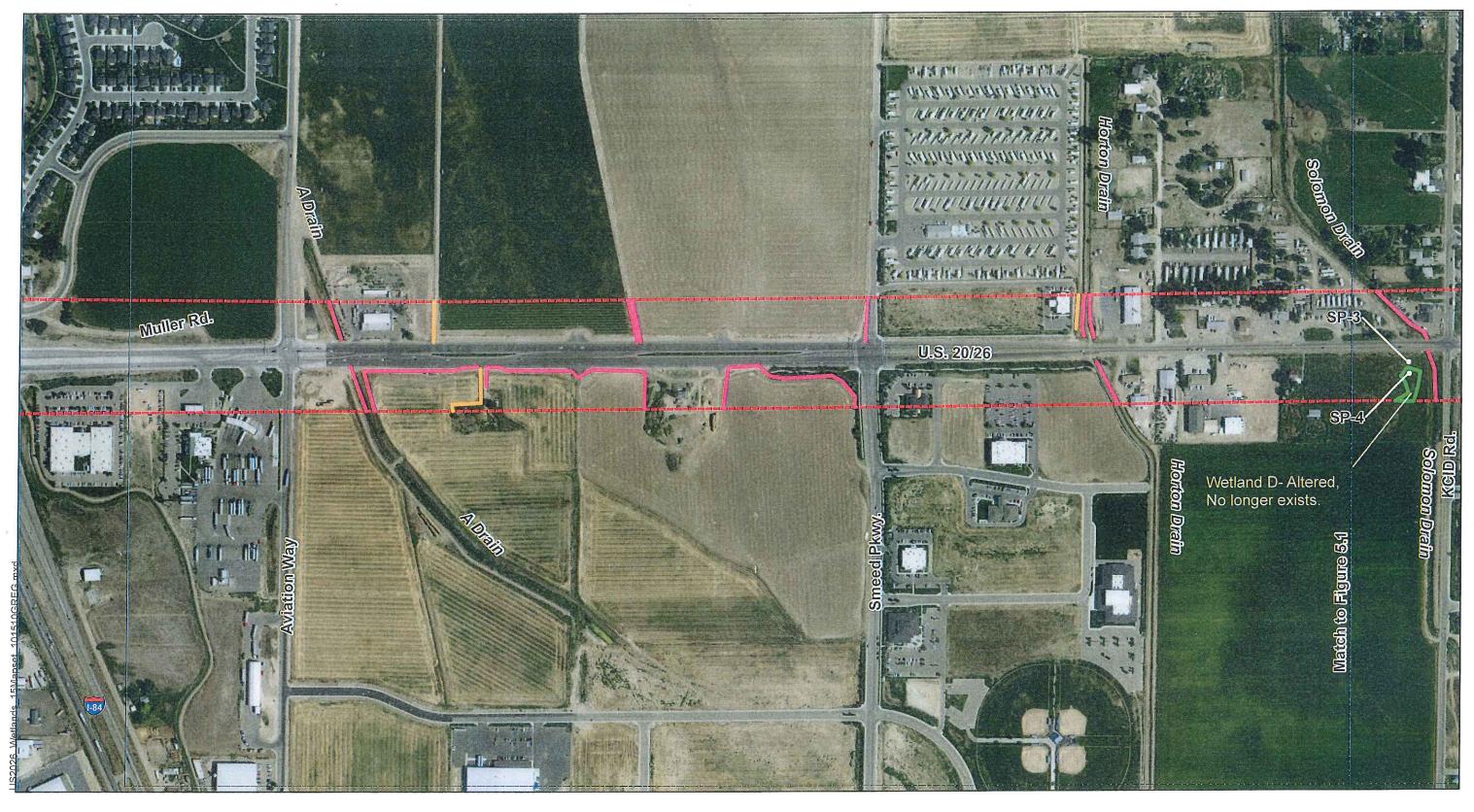
**APPENDIX A-** Figures













1,000

#### Scale in Fee

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User

## Legend

#### Wetlands TYPE

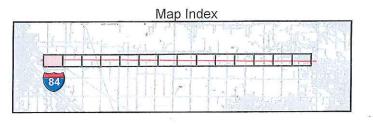
Concrete Lined Channel

Unlined / Dirt Channel

Natural Stream

Potential Wetland Area

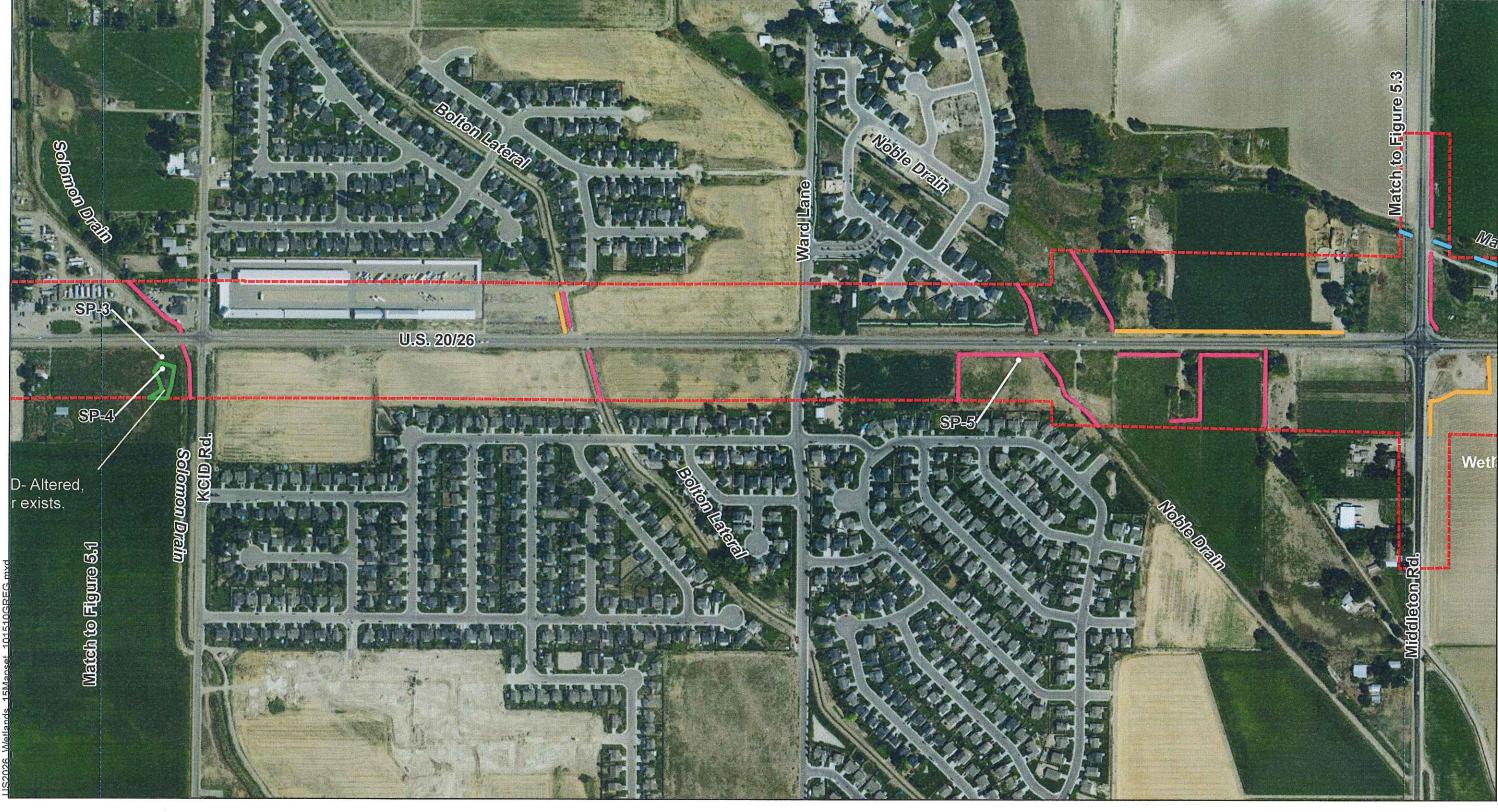


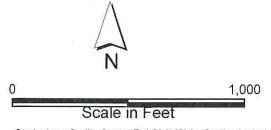


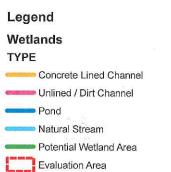
## Potentially Jurisdictional Wetlands/Waters of the US

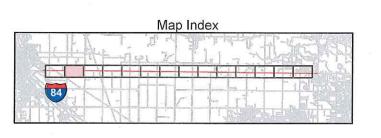
Key: 07826, US 20/26 Corridor Preservation Study Ada and Canyon Counties, ID

Source: Field visit, Oct 28, 2015





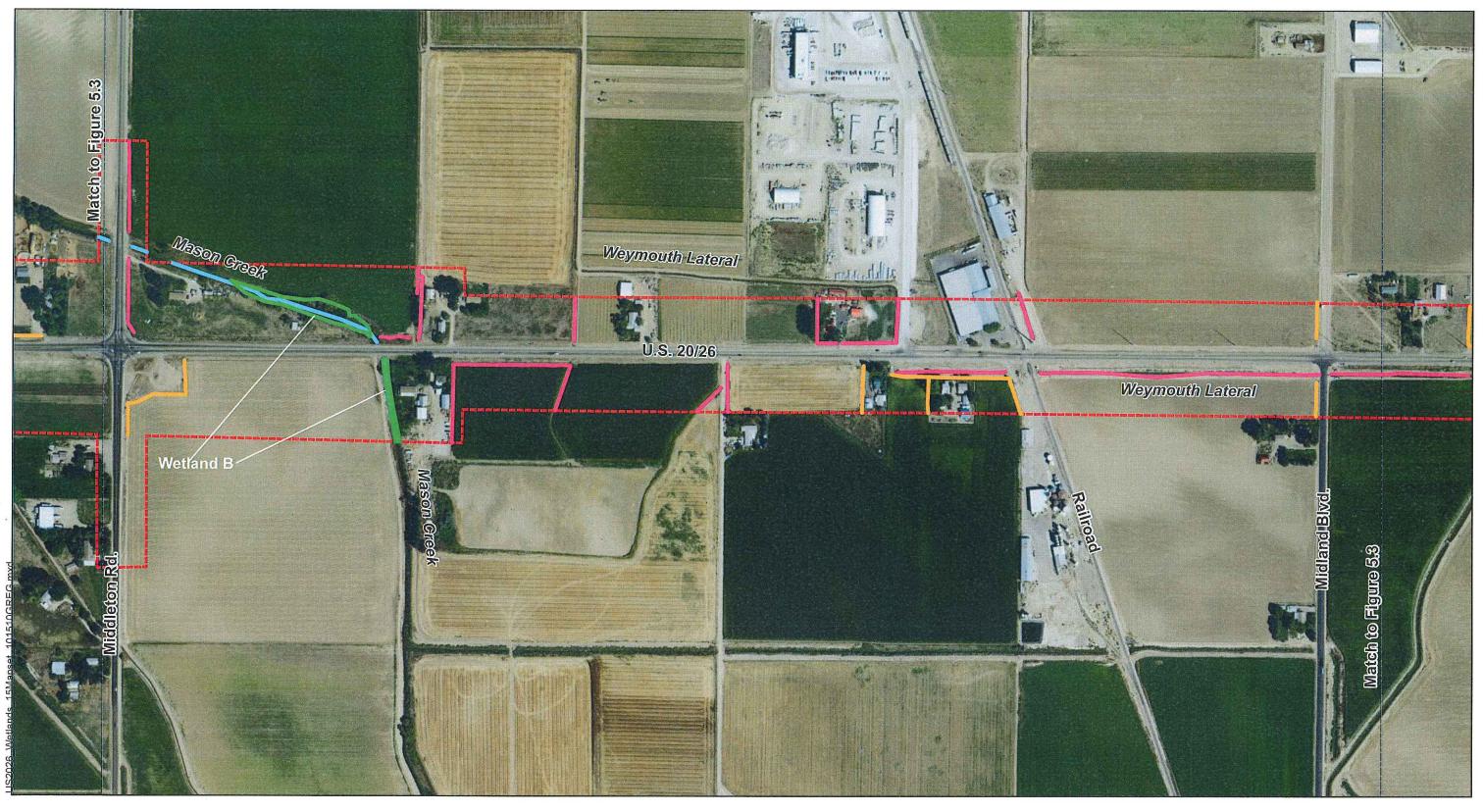


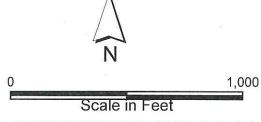


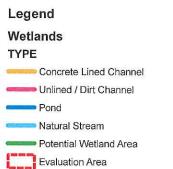
## Potentially Jurisdictional Wetlands/Waters of the US

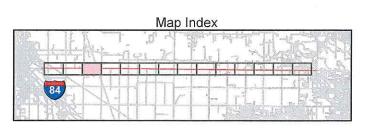
Key: 07826, US 20/26 Corridor Preservation Study Ada and Canyon Counties, ID

Source: Field visit, Oct 28, 2015





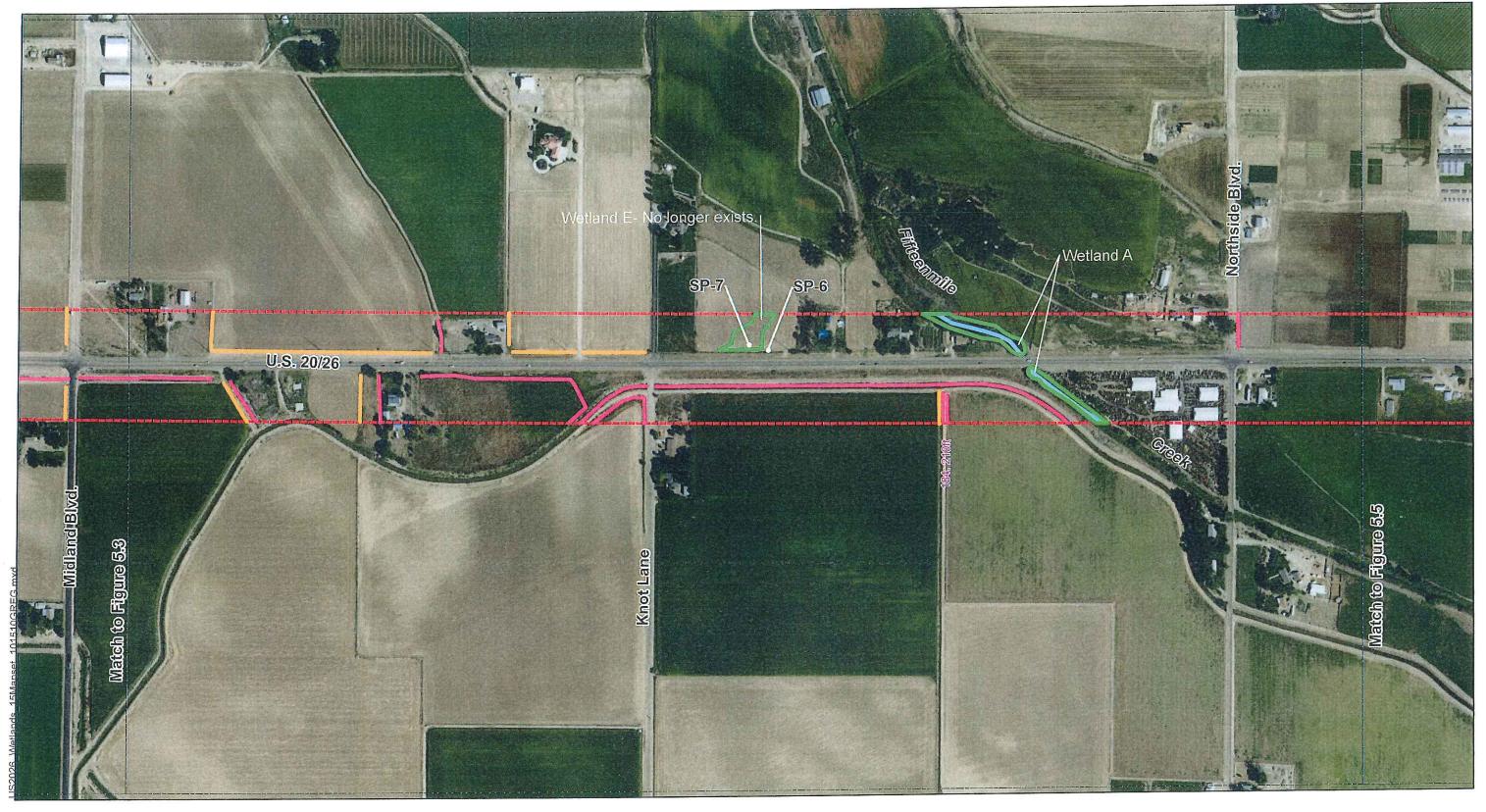


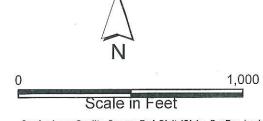


## Potentially Jurisdictional Wetlands/Waters of the US

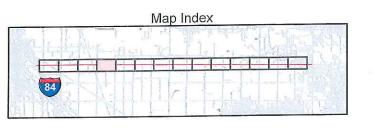
Key: 07826, US 20/26 Corridor Preservation Study Ada and Canyon Counties, ID

Source: Field visit, Oct 28, 2015





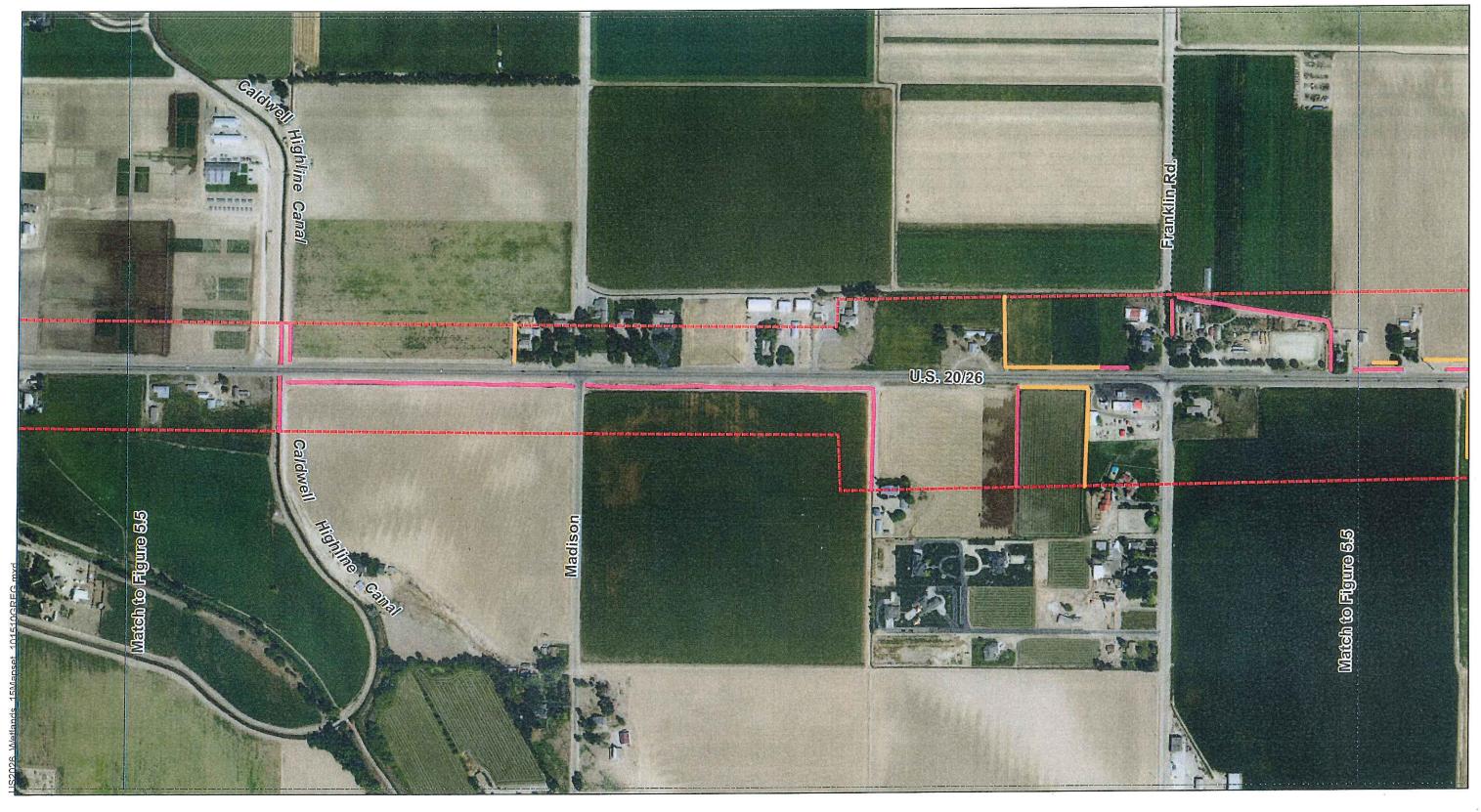


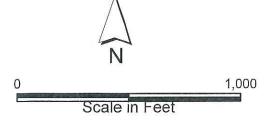


## Potentially Jurisdictional Wetlands/Waters of the US

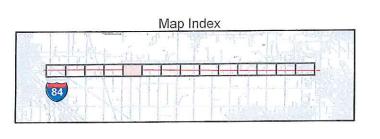
Key: 07826, US 20/26 Corridor Preservation Study Ada and Canyon Counties, ID

Source: Field visit, Oct 28, 2015





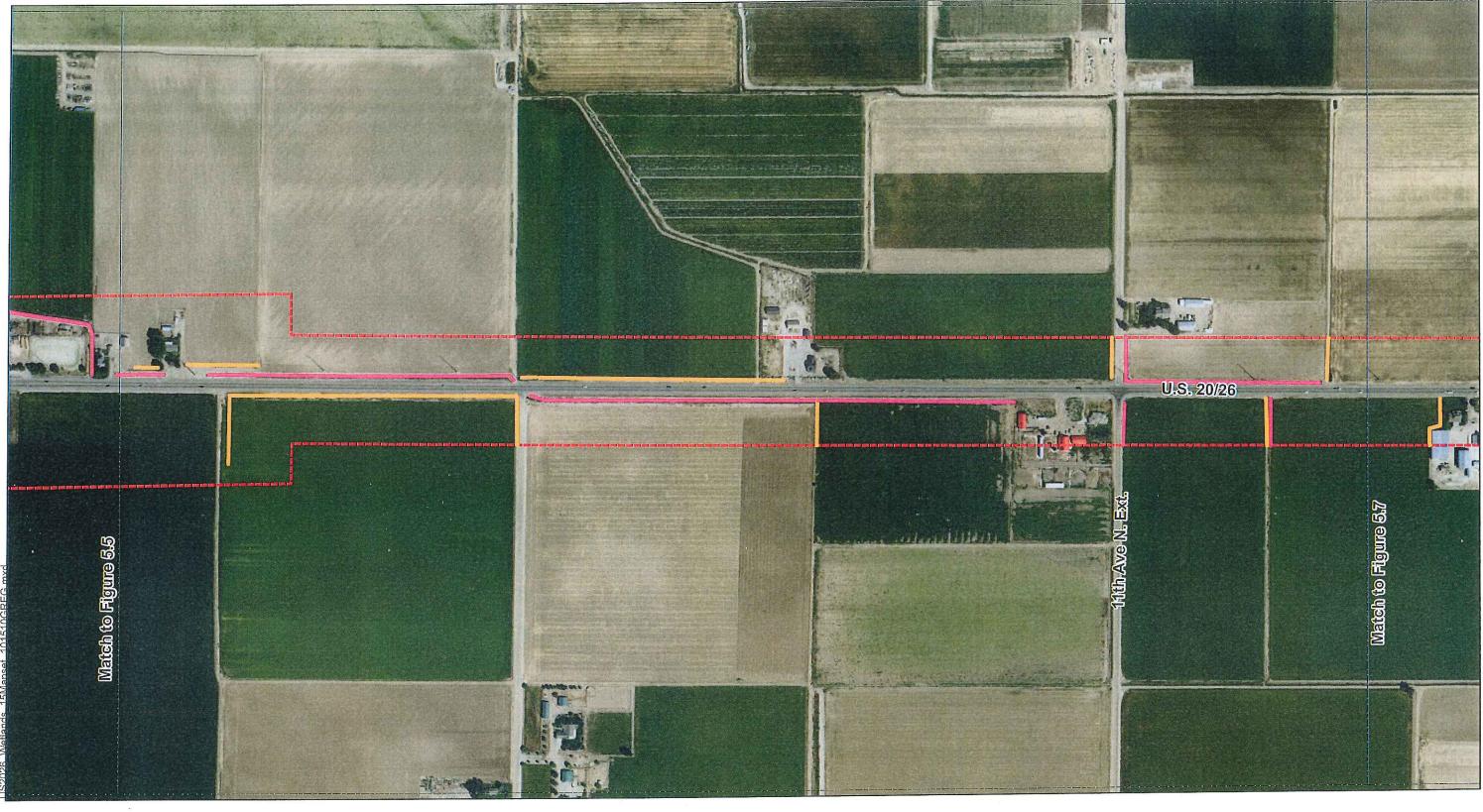


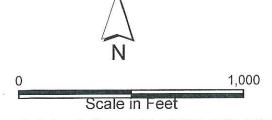


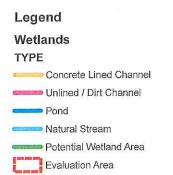
## Potentially Jurisdictional Wetlands/Waters of the US

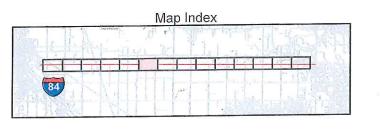
Key: 07826, US 20/26 Corridor Preservation Study Ada and Canyon Counties, ID

Source: Field visit, Oct 28, 2015





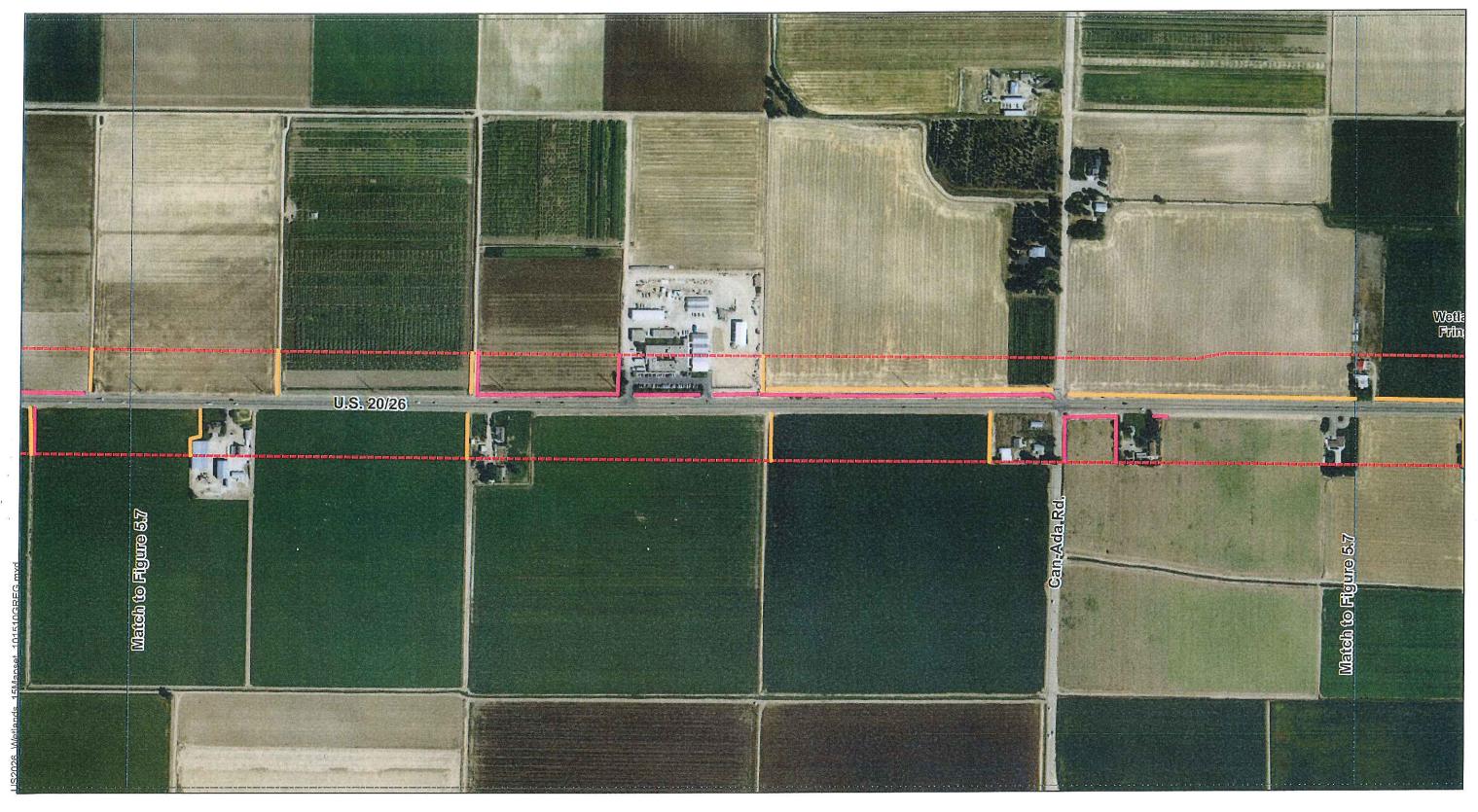


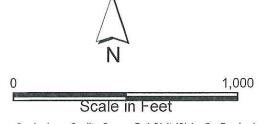


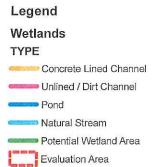
# Potentially Jurisdictional Wetlands/Waters of the US

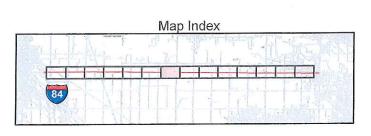
Key: 07826, US 20/26 Corridor Preservation Study Ada and Canyon Counties, ID

Source: Field visit, Oct 28, 2015





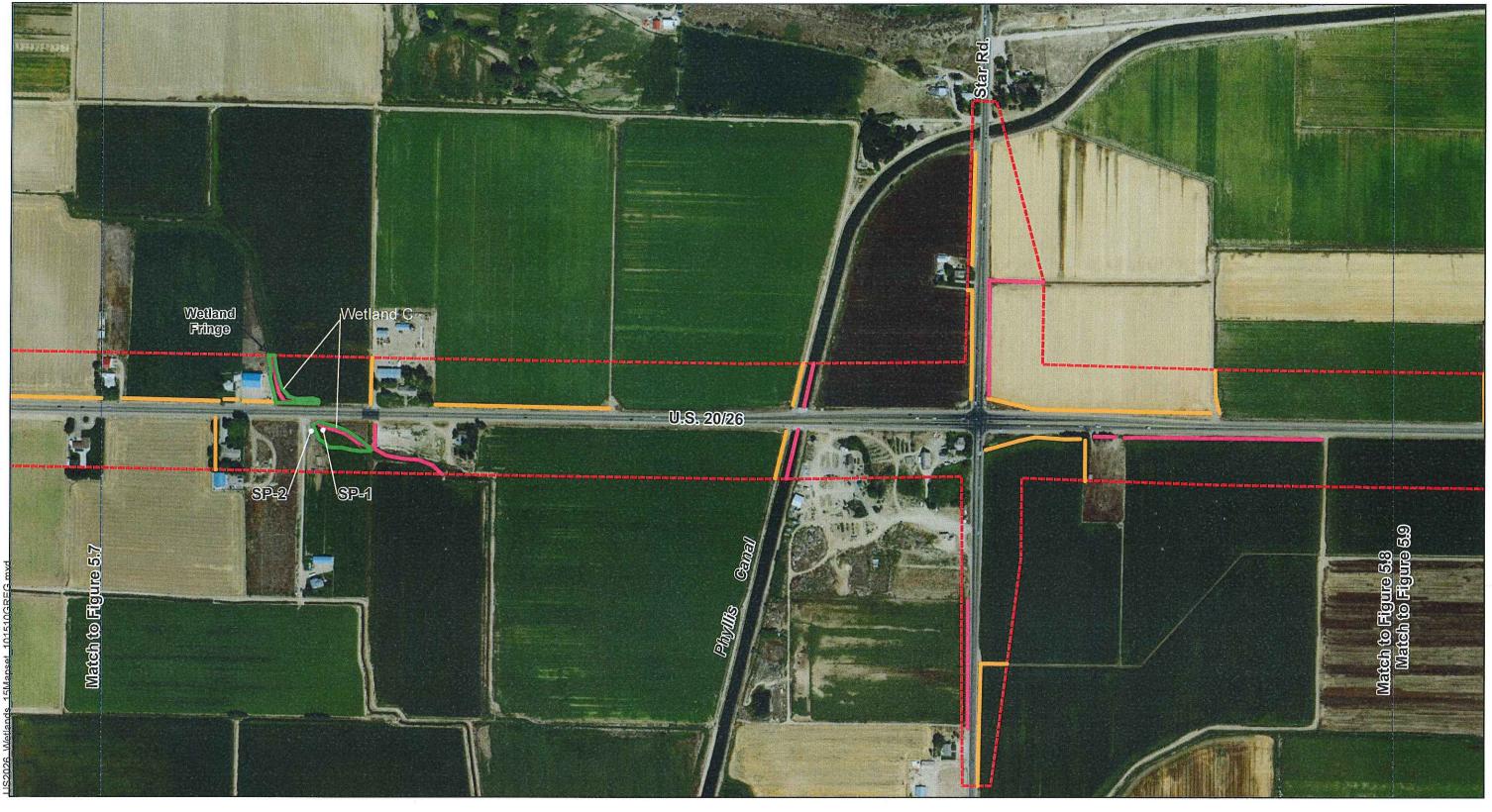


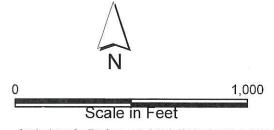


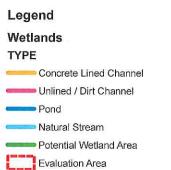
## Potentially Jurisdictional Wetlands/Waters of the US

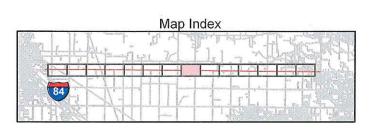
Key: 07826, US 20/26 Corridor Preservation Study Ada and Canyon Counties, ID

Source: Field visit, Oct 28, 2015





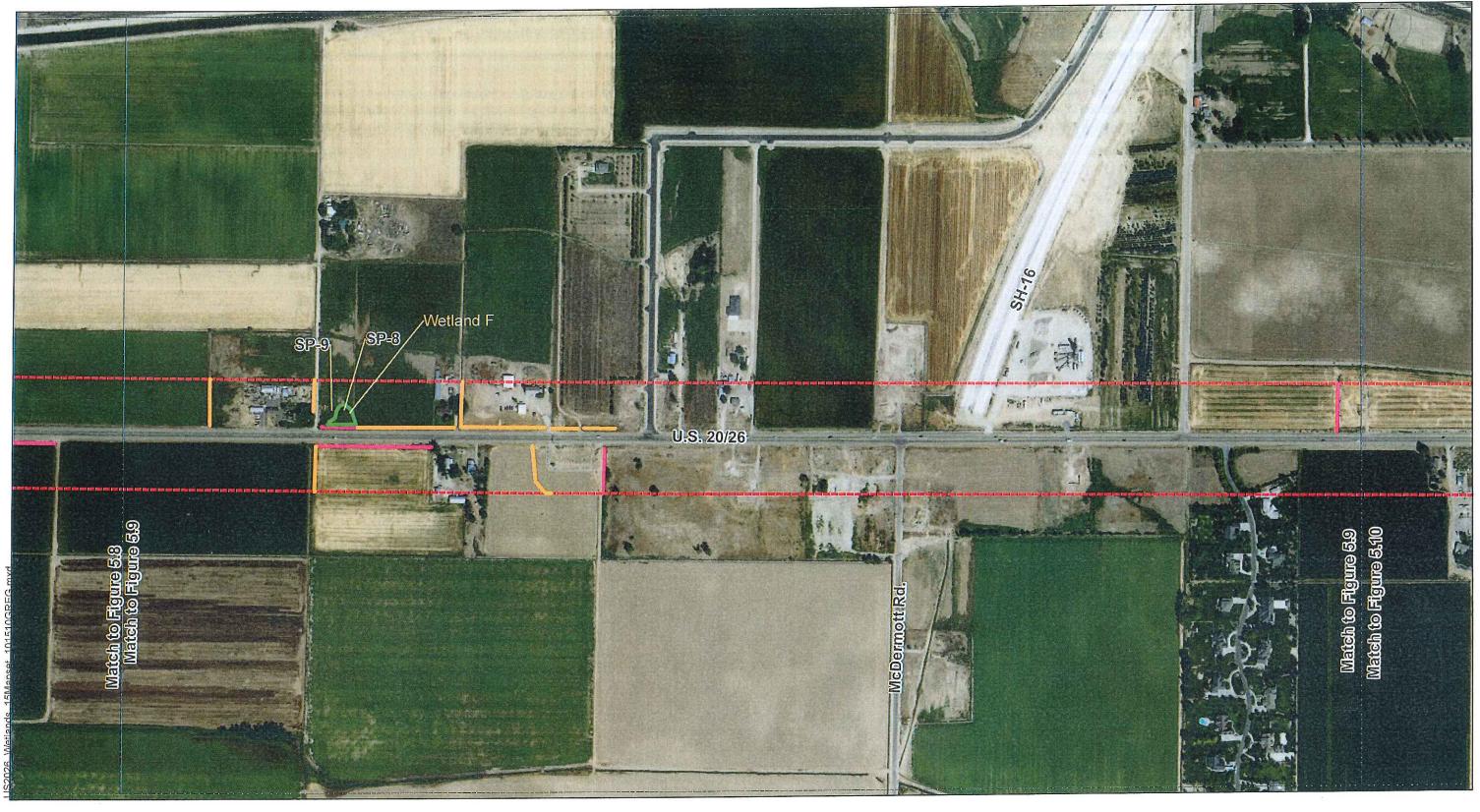


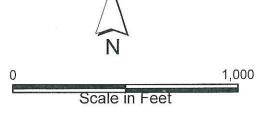


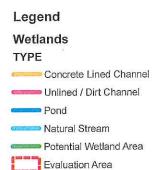
## Potentially Jurisdictional Wetlands/Waters of the US

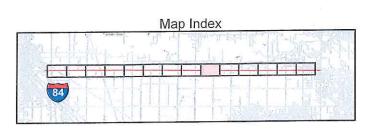
Key: 07826, US 20/26 Corridor Preservation Study Ada and Canyon Counties, ID

Source: Field visit, Oct 28, 2015









## Potentially Jurisdictional Wetlands/Waters of the US

Key: 07826, US 20/26 Corridor Preservation Study Ada and Canyon Counties, ID

Source: Field visit, Oct 28, 2015





1,000

Scale in Feet

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User

#### Legend

#### Wetlands TYPE

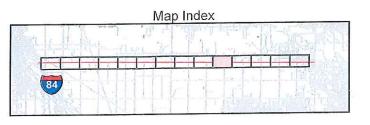
Concrete Lined Channel
Unlined / Dirt Channel

Pond

Natural Strear

Potential Wetland Area

Evaluation Area

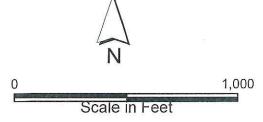


## Potentially Jurisdictional Wetlands/Waters of the US

Key: 07826, US 20/26 Corridor Preservation Study Ada and Canyon Counties, ID

Source: Field visit, Oct 28, 2015





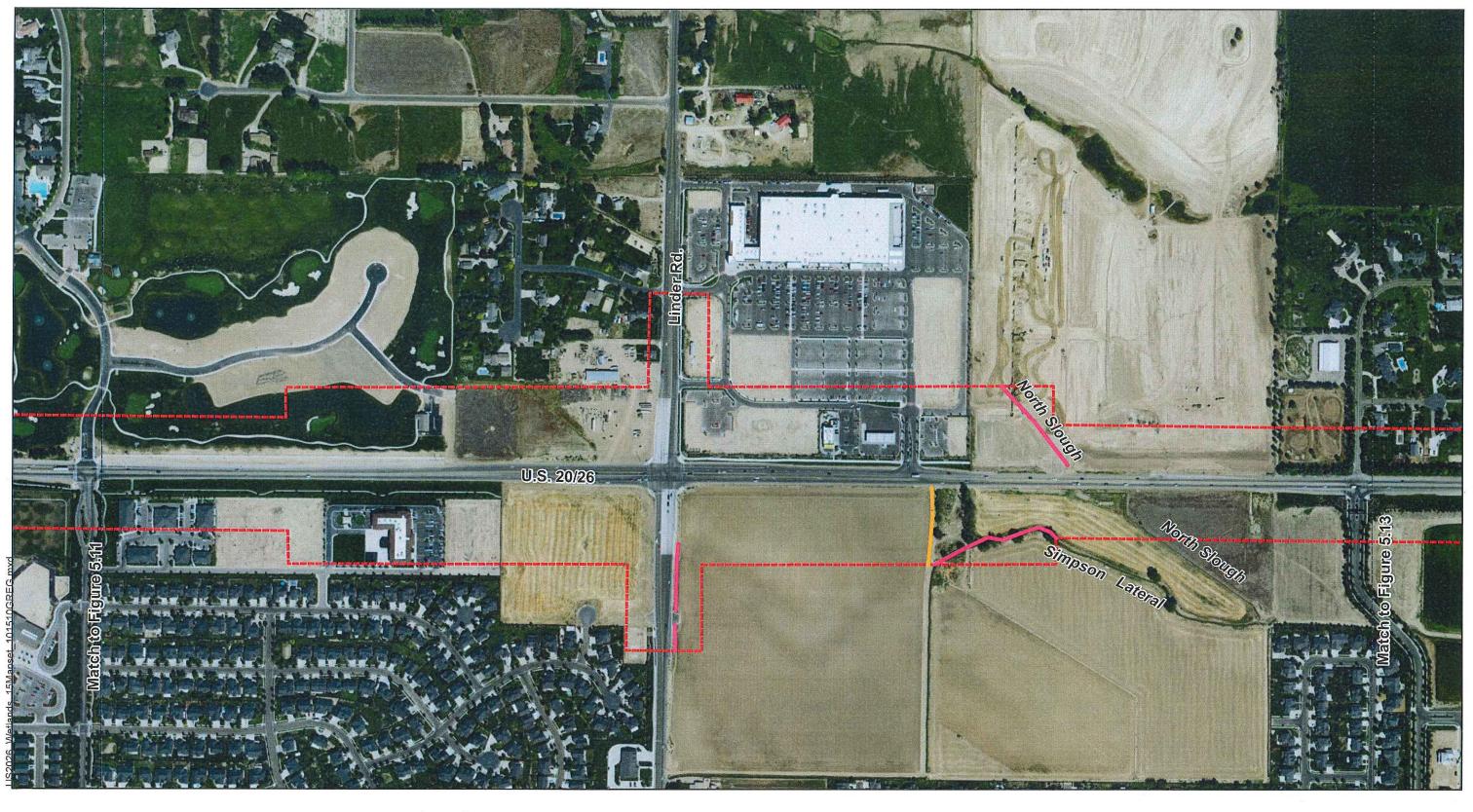


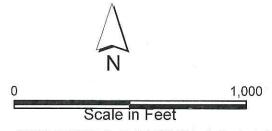


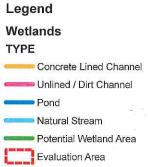
## Potentially Jurisdictional Wetlands/Waters of the US

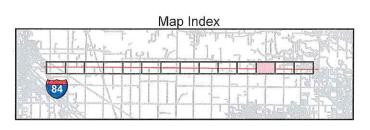
Key: 07826, US 20/26 Corridor Preservation Study Ada and Canyon Counties, ID

Source: Field visit, Oct 28, 2015









## Potentially Jurisdictional Wetlands/Waters of the US

Key: 07826, US 20/26 Corridor Preservation Study Ada and Canyon Counties, ID

Source: Field visit, Oct 28, 2015



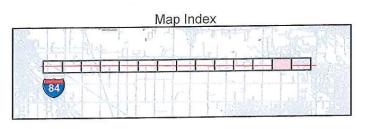


1,000

Scale in Feet

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User

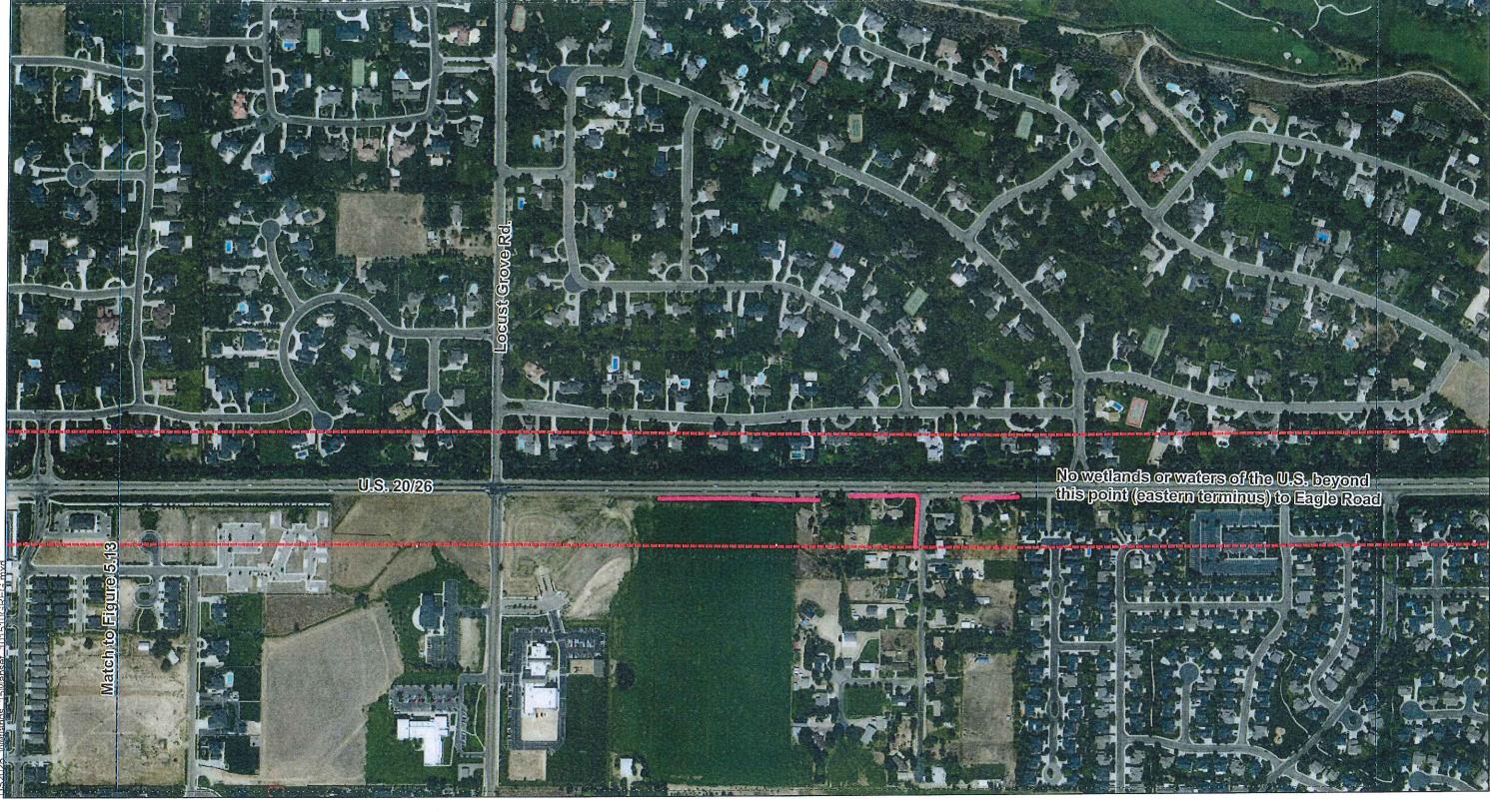
# Legend Wetlands TYPE Concrete Lined Channel Unlined / Dirt Channel Pond Natural Stream Potential Wetland Area Evaluation Area

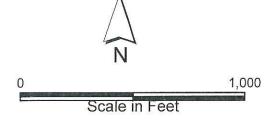


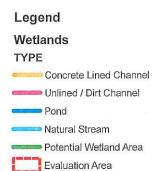
## Potentially Jurisdictional Wetlands/Waters of the US

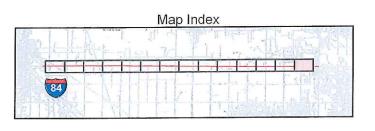
Key: 07826, US 20/26 Corridor Preservation Study Ada and Canyon Counties, ID

Source: Field visit, Oct 28, 2015









## Potentially Jurisdictional Wetlands/Waters of the US

Key: 07826, US 20/26 Corridor Preservation Study Ada and Canyon Counties, ID

Source: Field visit, Oct 28, 2015

	U.S. Highway 20/26 corridor Preservation Stud	y, Wetlands and Waters of the U.S. Report Idaho Transportation Department
		APPENDIX B-Wetand Data Sheets
January 2011   Undated Nove	mber 2015	

#### WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: US Hwy 20-26 Corridor Preservation		City/Cour	nty: Ada &	Canyon Counties	Sampling	Date: <u>10-11 May, 2007</u>
Applicant/Owner: <u>Idaho Transportation Dept/COMPASS</u>				State: ID	Sampli	ing Point: SP-1
Investigator(s): CM/TF	Se	ction, Towr	nship, Rang	e: <u>Sec. 30, T4N R</u>	1W	
Landform (hillslope, terrace, etc.): valley bottom						Slope (%): <u>0%</u>
Subregion (LRR): Snake River Basin	Lat: 43.65	4		Long: -116.503	3	Datum:
Soil Map Unit Name: Aeric Haplaquept						
Are climatic / hydrologic conditions on the site typical for this						
Are Vegetation, Soil, or Hydrology sig	-					Yes <u>x</u> No
Are Vegetation, Soil, or Hydrology na				eded, explain any ar		
SUMMARY OF FINDINGS – Attach site map s	showing	samplin	g point lo	ocations, transe	ects, impo	ortant features, etc.
Hydrophytic Vegetation Present? Yes _ x No	0	lo th	e Sampled	Araa		
Hydric Soil Present? Yes x No			e Sampled in a Wetlan		Y I	No
Wetland Hydrology Present? Yes <u>x</u> No				_		
Remarks: Sample plot located south of the 20-26 roadway of herbicide application on roadway prism. This sample plot circumstances deemed 'normal.'						
VEGETATION						
Tree Stratum (Use scientific names.)	Absolute % Cover			Dominance Test v	worksheet:	
1				Number of Domina That Are OBL, FAC		1 (A)
2.						(/\)
3.				Total Number of De Species Across All		1 (B)
4				•		
Total Cover:				Percent of Domina That Are OBL, FAC		100% (A/B)
Sapling/Shrub Stratum						
1				Prevalence Index		
2						Multiply by:
3						x 1 = x 2 =
4						x 3 =
5 Total Cover:						x 4 =
Herb Stratum	•					x 5 =
1. Phalaris arundinacea	100	Υ	FACW	-		A)(B)
2						
3				Prevalence In	ndex = B/A	=
4				Hydrophytic Vege		
5				X Dominance		
6				Prevalence Inc		1
7				Morphological data in Rer	Adaptations	s <sup>1</sup> (Provide supporting a separate sheet)
8						egetation <sup>1</sup> (Explain)
Total Cover: Woody Vine Stratum	100	_			<b>,</b> -   <b>,</b> -	3
1				<sup>1</sup> Indicators of hydri be present.	c soil and w	etland hydrology must
2				•		
Total Cover:				Hydrophytic Vegetation		
% Bare Ground in Herb Stratum <u>&lt;5%</u> % Cov	er of Biotic	Crust0	1%	Present?	Yes x	No
Remarks:						
Roadway prism to north appears treated with herbicides. F	Reed canary	grass som	ewhat contr	olled by grazing sou	th of plot if f	enced pasture.

US Army Corps of Engineers

SOIL Sampling Point: SP-1

Profile Desc	ription: (Describe t	o the depth	needed to docur	nent the ir	ndicator	or confirm	the abser	nce of indicators.)
Depth	Matrix		Redo	x Features	;			
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-12	10YR 3/3						Si	recent alluvium, no structure
-							-	
	-							
1			and an and Madelia	21			O D4 Ob	and at Manager
	oncentration, D=Deple Indicators: (Application)					e Lining, R		ors for Problematic Hydric Soils <sup>3</sup> :
-		DIE IO AII LI			:u. <i>)</i>			•
Histosol			Sandy Redo	. ,				m Muck (A9) (LRR C)
	pipedon (A2)		Stripped Ma		(5.4)			m Muck (A10) (LRR B)
Black His	` '		Loamy Muc	-				duced Vertic (F18)
	n Sulfide (A4)	`	Loamy Gley		(F2)			d Parent Material (TF2)
	Layers (A5) (LRR C	)	Depleted M	, ,	F6)		Oth	ner (Explain in Remarks)
	ck (A9) (LRR D)	(111)	Redox Dark		,			
	d Below Dark Surface	(ATT)	Depleted Da					
	ark Surface (A12)		Redox Depi Vernal Pool		0)		3Indiant	ors of hydrophytic vegetation and
-	lucky Mineral (S1) sleyed Matrix (S4)		veinai Pooi	S (F9)				and hydrology must be present.
	_ayer (if present):						Wella	and nydrology must be present.
· · ·								
Depth (inc	ches):						Hydric S	Soil Present? Yes <u>x</u> No
Remarks:								
HYDROLO	GY							
Wetland Hyd	drology Indicators:						<u>Se</u>	condary Indicators (2 or more required)
Primary Indic	ators (any one indica	tor is sufficie	ent)				<u> </u>	_ Water Marks (B1) (Riverine)
Surface	Water (A1)		Salt Crust	(B11)			х	Sediment Deposits (B2) (Riverine)
	ter Table (A2)		Biotic Crus					Drift Deposits (B3) (Riverine)
x Saturation			Aquatic In		s (B13)			Drainage Patterns (B10)
<del></del>	arks (B1) ( <b>Nonriveri</b> i	ne)	Hydrogen		` ,			Dry-Season Water Table (C2)
·	nt Deposits (B2) ( <b>Non</b>	•				Living Roo	ts (C3)	Thin Muck Surface (C7)
	oosits (B3) ( <b>Nonriver</b> i		Presence			_		Crayfish Burrows (C8)
	Soil Cracks (B6)	110)	Recent Iro		,	•		_ Saturation Visible on Aerial Imagery (C9)
· <del></del>	on Visible on Aerial In	2000ry (P7)	Other (Exp			rea Solis (C		
		lagery (b7)	Other (Ext	nam m Kei	narks)		_	Shallow Aquitard (D3)
	tained Leaves (B9)					1		_ FAC-Neutral Test (D5)
Field Observ		- NI-	Donath (in	- I \				
Surface Water			x Depth (inc		0.11	-		
Water Table			Depth (inc			-		
Saturation Pr		s <u>x</u> No	Depth (inc	ches):	6"	_ Wetla	and Hydrol	logy Present? Yes x No No
(includes cap Describe Red	onary fringe) corded Data (stream	gauge, moni	toring well, aerial ¡	ohotos, pre	evious ins	pections), i	if available:	:
	,			•				
Remarks:								
	risdictional waterway	feature is as	ssociated with adia	cent irriga	tion cana	I. Surface	and near s	urface water transmission from canal to
	pasture appears to su							

#### WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: US Hwy 20-26 Corridor Preservation		City/Coun	ty: <u>Ada &amp;</u>	Canyon Counties S	ampling Date: <u>10-11 May, 2007</u>
Applicant/Owner: <u>Idaho Transportation Dept/COMPASS</u>				State: ID	Sampling Point: SP-2
Investigator(s): CM/TF	Se	ction, Town	ship, Rang	e: <u>Sec. 30, T4N R1W</u>	
Landform (hillslope, terrace, etc.): valley bottom	L	ocal relief (	concave, c	onvex, none): Flat	Slope (%): <u>0%</u>
Subregion (LRR): Snake River Basin	Lat: 43.65	54	Lor	ıg: <u>-116.503</u>	Datum:
Soil Map Unit Name:					
Are climatic / hydrologic conditions on the site typical for this					
Are Vegetationx , Soil, or Hydrology si	-				
Are Vegetation, Soil, or Hydrology na				eded, explain any answ	
SUMMARY OF FINDINGS – Attach site map s					
Hydrophytic Vegetation Present? Yes No	) <u>X</u>	le the	e Sampled	Area	
Hydric Soil Present? Yes No			n a Wetlan		No <u>x</u>
Wetland Hydrology Present? Yes No				·	
Remarks: Sample plot located south of the 20-26 roadway This area was recently burned based on charred vegetation portions of the area.					
VEGETATION					
Trac Stratum (Llac aciontific names )		Dominant Species?		Dominance Test wor	rksheet:
, , ,	% Cover			Number of Dominant : That Are OBL, FACW	
1 2				That Are OBL, I ACW	, 011 AC (A)
3.				Total Number of Dom Species Across All St	
4.				·	
Total Cover:				Percent of Dominant S That Are OBL, FACW	Species ', or FAC: <u>0%</u> (A/B)
Sapling/Shrub Stratum				Prevalence Index wo	
1					Multiply by:
2					x 1 =
4.					x 2 =
5.					x 3 =
Total Cover:					x 4 =
Herb Stratum				UPL species	x 5 =
1. Bromus tectorum				Column Totals:	(A) (B)
2. Geranium sp. (G. pusillum?)				Danielan en la de	D/A -
3					ex = B/A =
4				Hydrophytic Vegetat  Dominance Test	
5				Prevalence Index	
6					aptations <sup>1</sup> (Provide supporting
7					ks or on a separate sheet)
8Total Cover:				Problematic Hydr	ophytic Vegetation¹ (Explain)
Woody Vine Stratum					
1				<sup>1</sup> Indicators of hydric so be present.	oil and wetland hydrology must
2				Hydrophytic	
Total Cover:				Vegetation	
% Bare Ground in Herb Stratum 90% % Cov	er of Biotic	Crust		Present? Y	es No <u>x</u>
Remarks:				Had been a 2 2 2	full-tiff former d
Roadway prism to north appear treated with herbicides. Re	eed canaryo	grass some	wnat contro	iled by grazing south of	гріот іт renced pasture.

US Army Corps of Engineers

SOIL Sampling Point: SP-1

Profile Desc	ription: (Describe t	o the depth	needed to docu	ment the i	indicator	or confirm	the absenc	e of indicators.)
Depth	Matrix			x Feature		- 3		
(inches)	Color (moist)	<u></u> %	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-12+	10YR 3/3						SaSi	recent alluvium, no structure
				_	· ——			<u> </u>
								<u> </u>
								-
					· ——			- · <del></del>
				_				<u> </u>
	ncentration, D=Depl					e Lining, R		•
	ndicators: (Applica	ble to all Li			ed.)			s for Problematic Hydric Soils <sup>3</sup> :
Histosol	` '		Sandy Red					Muck (A9) (LRR C)
	ipedon (A2)		Stripped Ma	` '				Muck (A10) (LRR B)
Black His			Loamy Mud	-				iced Vertic (F18)
	n Sulfide (A4)		Loamy Gley		(F2)			Parent Material (TF2)
	Layers (A5) (LRR C	)	Depleted M		(FC)		Othe	r (Explain in Remarks)
	ck (A9) ( <b>LRR D</b> )	· (A11)	Redox Darl		` ,			
	Below Dark Surface rk Surface (A12)	(A11)	Depleted D Redox Dep					
	ucky Mineral (S1)		Vernal Poo		10)		3Indicator	s of hydrophytic vegetation and
-	leyed Matrix (S4)		vernari oo	13 (1 3)				d hydrology must be present.
	ayer (if present):						Wellan	a Hydrology made be present.
Type:	, (							
			<del></del>				Uvdria Ca	il Present? Yes x No
Depth (inc	iles)						nyuric 30	il Present? Yes <u>x</u> No
Remarks:								
Soils appear	to be recent alluvium	i. Soils are l	oose/grainy, and i	nclude rou	unded grav	els.		
HYDROLO	GY							
Wetland Hyd	Irology Indicators:						Seco	ondary Indicators (2 or more required)
-	ators (any one indica	ntor is suffici	ent)					Water Marks (B1) (Riverine)
Surface \		ttor to carrior	Salt Crust	(D11)				Sediment Deposits (B2) (Riverine)
	` ,		Biotic Crus	` '				
Saturatio	ter Table (A2)			` ,	o (P12)			Drift Deposits (B3) ( <b>Riverine</b> ) Drainage Patterns (B10)
	` ,	\	Aquatic In		, ,			• ,
	arks (B1) ( <b>Nonriveri</b> i		Hydrogen		, ,	Lindaa Daad		Dry-Season Water Table (C2)
	t Deposits (B2) (Non				_	_		Thin Muck Surface (C7)
	osits (B3) (Nonriver	ine)	Presence		•	•		Crayfish Burrows (C8)
	Soil Cracks (B6)	(5-1)				ed Soils (C		Saturation Visible on Aerial Imagery (C9)
	on Visible on Aerial Ir	nagery (B7)	Other (Ex	plain in Re	emarks)			Shallow Aquitard (D3)
·	ained Leaves (B9)							FAC-Neutral Test (D5)
Field Observ								
Surface Water	er Present? Ye	es No	x Depth (in	ches):		-		
Water Table I	Present? Ye	es No	x Depth (ir	nches):		-		
Saturation Pr	esent? Ye	es No	x_ Depth (in	ches):		Wetla	and Hydrolo	gy Present? Yes No _x
(includes cap	illary fringe)						<b>16</b> (1 - 1 - 1	
Describe Rec	corded Data (stream	gauge, mon	itoring well, aerial	pnotos, pr	evious ins	pections), i	ıt avaılable:	
Remarks:								
					cent alluvi	um. Howe	ver, elevation	n and distance from canal, vegetation
break and lac	ck of evidence of wet	and hydrolo	gy point to non-we	etland.				

#### WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: US Hwy 20-26 Corri	dor Preservation		City/County: 0	Canyon County		Sampling Date:	10/01/2010
Applicant/Owner: Dept./COMPAS	rtation				Sampling Point:	_	
Investigator(s):			Section, Towns	hip, Range:	Sec. 19,T4N, R2W	Boise Meridian	
Landform (hillslope, terrace, etc.):	Valley Bottom		Local relief (cor	ncave, convex,	none): Flat	Slope (%):	<1%
Subregion (LRR):	Snake River Basin (LRR B)		Lat: 43.662	Lo	ong: <u>-116.628</u>	Datum:	
Soil Map Unit Name:							
Are climatic / hydrologic conditions							
Are Vegetation X Soil	or Hydrology	si	gnificantly distur	bed? Are "N	Iormal Circumstance	es" present? Ye	es X No
Are Vegetation Soil	or Hydrology	na	turally problema	atic? (If need	ded, explain any ans	swers in Remarks.	.)
SUMMARY OF FINDINGS -	- Attach site map	showin	g sampling	point locat	ions, transects	, important fe	atures, etc.
Hydrophytic Vegetation Present?	Yes No	Х	la tha C	ampled Area			
Hydric Soil Present?	Yes No	X		ampled Area Wetland?	Yes	No _ <b>X</b>	-
Wetland Hydrology Present?	Yes No	_X					
VEGETATION - Use scient	tific names of plan	nts.					
<u>Tree Stratum</u> (Plot size:_)		Absolute % Cover		Indicator Status	Dominance Test	workshoot:	
1.	<del>=</del>		•		Number of Domina		
2.				·	that are OBL, FAC		1 (A)
3. 4.					Total Number of D	ominant	
T			·		Species Across Al		3 (B)
			=Total Cover		_		
Sapling/Shrub Stratum (Plot size:	)				Percent of Domina that are OBL, FAC		33% (A/B)
1	<del></del>				at are est, 17te		(**2)
2					Prevalence Index	, workshoot	
3.					Total % Cover of:		Multiply by:
4 5					OBL species		: Waltiply by.
·					FACW species	x 2 =	
			= Total Cover		FAC species	x 3 =	•
Herb Stratum (Plot size: 15' diam.	)				FACU species UPL species	x 4 = x 5 =	<u> </u>
1. Lactuca serriola	, 	15	n	FACU	Column Totals:		(B)
2. Bromus tectorum		20	Y	UPL			
3. Festuca arundinacea		30 30	Y	FACU	Prevalence	Index = B/A =	
4. Agropyron sp.			- <del></del> -	FACU	Hydrophytic Vege	etation Indicators	S:
56.						nce Test is >50%	
6					Prevalen	nce Index is ≤3.0 <sup>1</sup>	
8.	·						1 (Provide supporting
9						Remarks or on a se	• .
10.						Non-Vascular Pla	
11							egetation¹ (Explain)
		95%	6 = Total Cover		present, unless dis		d hydrology must be natic.
Woody Vine Stratum (Plot size: _) 1.					Hydrophytic Vegetation	Yes	No X
1. 2.					Present?	res	NO
	=		_ = Total Cover				
% Bare Ground in Herb Stratur	n: <u>5%</u>	% Cover B	iotic Crust:				
Remarks: Site is pasture for lives	tock						
Site is pastare for fives							

SOIL Sampling Point: SP-03

Depth Matrix (cinches) Color (moist) % Color (moist) % Type   Loc 2   Truture   Remarks    0-6+ 10YR 4/3				th needed to docur					
Type: C=Concentration. D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.   Eccav. Refusal @ 6" due to signif, grave component. Graving for grave for graving for grave for graving for gra	Depth	Matrix			Re	edox Features	i		
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.   *Location: PL=Pore Lining, M=Matrix, Plydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)   Indicators for Problematic Hydric Soils*	(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		Remarks
Type: C=Concentration. D=Depletion. RM=Reduced Matrix. CS=Covered or Coated Sand Grains.   Location: PL=Pore Lining, M=Matrix.	0-61	10VP 4/2						•	Excay Pofusal @ 6" duo
**Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coaled Sand Grains.  **Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Sandy Redox (S5) Histosol (A2) Sintiped Matrix (S6) Hydrogen Sulfide (A4) Loamy Mucky Matrix (F2) Stratified Layers (A5)(LRR C) Depleted Matrix (F2) Stratified Layers (A5)(LRR C) Depleted Matrix (F2) Stratified Layers (A5)(LRR C) Depleted Both Surface (F6) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleved Matrix (F2) Redox Depressions (F6) Werland Hydrology indicators of hydrophytic vegetation and welland hydrology must be present, unless disturbed or problematic.  **Restrictive Layer (if present): Type: n/a Depth (inches):  **Present?**  **Wettand Hydrology Indicators: Phydric Soil **Yes Present?* **No X*  **Wetter Marks (B1)(Nonriverine) Hydropogy Indicators: **Depth (inches): **Secondary Indicators (2 or more required) Sourface Water (A1) Sourface Water (A1) Sourface Water (A1) Aquater Invertebrates (B13) Water Marks (B1)(Nonriverine) Hydropogy Indicators: **Depth (inches): **Orth Deposits (B2)(Nonriverine) Hydropogy Indicators: **Orth Deposits (B3)(Nonriverine) Hydrop	U-0 <del>+</del>							LIII	
'Type: C=Concentration. D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.									Gravels rounded to sub-
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosoi (A1) Sandy Redox (55) Histosoi (A1) Sitpeped Matrix (56) Black Histo: (A2) Black Histo: (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Black Histo: (A3) Hydrogen Sulfide (A4) Depleted Matrix (F3) Torm Muck (A9)(LRR C) Depleted Matrix (F3) Torm Muck (A9)(LRR C) Depleted Matrix (F3) Torm Muck (A9)(LRR C) Depleted Batrix (F3) Depleted Batrix (F3) Thick Dark Surface (A11) Depleted Dark Surface (F6) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Restrictive Layer (if present): Type: I/3 Depth (inches):  Wetland Hydrology Indicators: Present?  Wetland Hydrology Indicators: Present?  Wetland Hydrology Indicators: Primary Indicators (Iminimum of one required), check all that apply) Surface Water (A1) Salturation (A3) Aquatic Invertebrates (B13) Water Marks (B1)(Knorriverine) Hydrogen Sulfide Codor (C1) Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Drift Deposits (B3)(Norriverine) Oxidized Ribinory (Explain in Remarks) Fresence of Reduced Iron (C4) Thin Muck Surface (C7) Torsylish Burrows (C8) Saturation Visible on Aerial Imagery (B7) Other (Explain in Remarks)  Depth (inches):  Field Observations: Surface Water Present? Yes No X Depth (inches): Water Table (Papesits (B3)(Norriverine) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				-					Tourided
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histoso (Art) Sandy Redox (S5) Histoso (peppedox (A2) Stripped Matrix (S6) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Hydrogen Sulfide (Ad4) Loamy Gleyed Matrix (F2) Depleted Metrix (F3) Torm Muck (A9) (LRR C) Depleted Metrix (F3) Torm Muck (A9) (LRR C) Depleted Metrix (F3) Torm Muck (A9) (LRR C) Depleted Dark Surface (F6) Thick Dark Surface (A12) Redox Dark Surface (F7) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Restrictive Layer (if present): Type: Ind Depleted Metrix (F3) Restrictive Layer (if present): Type: Ind Depleted Metrix (S4) Restrictive Layer (if present): Type: Ind Depleted Metrix (S4) Restrictive Layer (if present): Type: Ind Depleted Metrix (S4) Restrictive Layer (if present): Type: Ind Depleted Metrix (S4) Restrictive Layer (if present): Type: Ind Depleted Metrix (S4) Restrictive Layer (if present): Type: Ind Depleted Metrix (S4) Restrictive Layer (if present): Type: Ind Depleted Metrix (S4) Restrictive Layer (if present): Type: Ind Depleted Metrix (S4) Restrictive Layer (if present): Type: Ind Depleted Metrix (S4) Restrictive Layer (if present): Type: Ind Depleted Metrix (S4) Restrictive Layer (if present): Type: Ind Depleted Metrix (S4) Restrictive Layer (if present): Type: Ind Depleted Metrix (S4) Restrictive Layer (if present): Type: Ind Depleted Metrix (S4) Restrictive Layer (if present): Type: Ind Depleted Metrix (S4) Restrictive Layer (if present): Type: Ind Depleted Metrix (S4) Redox Depleted Metrix (F2) Redox Depleted Me									
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)   Histosol (A1)				-		·			
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosoi (A1) Sandy Redox (55) Histosoi (A1) Sitpeped Matrix (56) Black Histo: (A2) Black Histo: (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Black Histo: (A3) Hydrogen Sulfide (A4) Depleted Matrix (F3) Torm Muck (A9)(LRR C) Depleted Matrix (F3) Torm Muck (A9)(LRR C) Depleted Matrix (F3) Torm Muck (A9)(LRR C) Depleted Batrix (F3) Depleted Batrix (F3) Thick Dark Surface (A11) Depleted Dark Surface (F6) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Restrictive Layer (if present): Type: I/3 Depth (inches):  Wetland Hydrology Indicators: Present?  Wetland Hydrology Indicators: Present?  Wetland Hydrology Indicators: Primary Indicators (Iminimum of one required), check all that apply) Surface Water (A1) Salturation (A3) Aquatic Invertebrates (B13) Water Marks (B1)(Knorriverine) Hydrogen Sulfide Codor (C1) Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Drift Deposits (B3)(Norriverine) Oxidized Ribinory (Explain in Remarks) Fresence of Reduced Iron (C4) Thin Muck Surface (C7) Torsylish Burrows (C8) Saturation Visible on Aerial Imagery (B7) Other (Explain in Remarks)  Depth (inches):  Field Observations: Surface Water Present? Yes No X Depth (inches): Water Table (Papesits (B3)(Norriverine) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:									
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histoso (A1) Sandy Redox (S5) Histoso (Poppedon (A2) Stripped Matrix (S6) Slack Histoso (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Depleted Metrix (F3) Torm Muck (A9) (LRR C) Depleted Metrix (F3) Torm Muck (A9) (LRR C) Depleted Metrix (F3) Torm Muck (A9) (LRR C) Depleted Dark Surface (F6) Torm Muck (A9) (LRR C) Depleted Dark Surface (F6) Thick Dark Surface (A12) Redox Dark Surface (F7) Thick Dark Surface (A12) Redox Depressions (F8) Vernal Pools (F9) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Restrictive Layer (if present): Type: Independent of the surface downward.  HYDROLOGY  Wetland Hydrology Indicators: Present?  Wetland Hydrology Indicators: Primary Indicators (Indicators (Indi	¹Type: C=Con	ncentration, D=Deple	etion, RM=	=Reduced Matrix, CS	S=Covered o	r Coated Sand	d Grains.	<sup>2</sup> Location: PL=F	ore Lining, M=Matrix.
Histoce (A1)	Hydric Soil In	dicators: (Applica	ble to all	LRRs, unless other	rwise noted.	.)			
Histic Epipedon (A2)	-					•			•
Hydrogen Sulfide (A4)	Histic E	pipedon (A2)		Strippe	ed Matrix (S6	6)			
Hydrogen Sulfide (A4)							pt MLRA 1)		
Stratified Layers (AS)(LRR C)	Hydroge	en Sulfide (A4)		Loamy	/ Gleyed Mat	rix (F2)		Red	Parent Material (TF2)
Communication   Redox Dark Surface (F6)   Depleted Below Dark Surface (A11)   Depleted Dark Surface (F7)   Depleted Below Dark Surface (A11)   Depleted Dark Surface (F7)   Depleted Dark Surface (F7)   Depleted Dark Surface (F7)   Sandy Surface (F7)   Redox Depressions (F8)   Vernal Pools (F9)   Sandy Gleyed Matrix (S4)			₹ C)		-				
Depleted Below Dark Surface (A12)	1 cm M	uck (A9)(LRR D)							
Thick Dark Surface (A12)	Deplete	d Below Dark Surfa	ce (A11)		ted Dark Surf	ace (F7)		31ndiantoro	-flexible the vegetation and
Sandy Mucky Mineral (S1)				Redox	Depressions				
Restrictive Layer (if present): Type:n/a	Sandy N	Mucky Mineral (S1)		Vernal	Pools (F9)				
Type: _n/a									
Depth (inches):  Remarks: Dry. Significant gravel component from surface downward.  HYDROLOGY  Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) Salt Crust (B11) High Water Table (A2) Salturation (A3) Aquatic Invertebrates (B13) Drift Deposits (B3)(Riverine) Sediment Deposits (B2)(Riverine) Sediment Deposits (B2)(Riverine) Drift Deposits (B3)(Riverine) Sediment Deposits (B3)(Riverine) Sediment Deposits (B3)(Riverine) Drift Deposits (B3)(		yer (if present):							
Remarks: Dry. Significant gravel component from surface downward.    HYDROLOGY								10	<u>v</u>
### Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)(Nonriverine)  Sediment Deposits (B2)(Riverine)  Aquatic Invertebrates (B13)  Drift Deposits (B2)(Riverine)  Sediment Deposits (B2)(Riverine)  Drainage Patterns (B10)	Depth (inches)	):		<del></del>			11636	III. No	<u>X</u>
Primary Indicators (minimum of one required: check all that apply)   Surface Water (A1)	Remarks: Dry	. Significant gravel	componer	nt from surface dowr	nward.				
High Water Table (A2) Saturation (A3) Aquatic Invertebrates (B13) Drift Deposits (B2)(Riverine)  Water Marks (B1)(Nonriverine) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2)(Nonriverine) Drainage Patterns (B10) Drainage	HYDROLO	GY rology Indicators:							
Saturation (A3)	HYDROLOG Wetland Hydr Primary Indica	GY rology Indicators: ators (minimum of or		d; check all that appl	ly)			•	
Water Marks (B1)(Nonriverine)  Hydrogen Sulfide Odor (C1)  Drainage Patterns (B10) Sediment Deposits (B2)(Nonriverine)  Oxidized Rhizospheres along Living Roots (C3)  Dry Season Water Table (C2) Drift Deposits (B3)(Nonriverine)  Presence of Reduced Iron (C4)  Thin Muck Surface (C7) Surface Soil Cracks (B6)  Recent Iron Reduction in Tilled Soils (C6)  Crayfish Burrows (C8) Saturation visible on Aerial Imagery (B7)  Other (Explain in Remarks)  (C9) Water-Stained Leaves (B9)  Shallow Aquatard (D3) FAC-Neutral Test (D5)  Field Observations: Surface Water Present?  Yes  No  X  Depth (inches):  Wetland Hydrology Present?  Water Table Present?  Yes  No  x  Depth (inches):  Present? (includes capillary fringe)  Drainage Patterns (B10) Dry Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation visible on Aerial Imagery (C9) Saturation visible on Aerial Imagery (C9) Shallow Aquatard (D3) FAC-Neutral Test (D5)	HYDROLO( Wetland Hydr Primary Indicat Surface W	GY rology Indicators: ttors (minimum of or Vater (A1)		d; check all that appl	ly) t (B11)			Water N	arks (B1)(Riverine)
Sediment Deposits (B2)(Nonriverine)  Drift Deposits (B3)(Nonriverine)  Drift Deposits (B3)(Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Water Table Present?  Yes  No  X  Depth (inches):  Water Table Present?  Yes  No  X  Depth (inches):  Water Table Present?  Yes  No  X  Depth (inches):  Wetland  Hydrology  Present?  Wetland  Hydrology  Present?  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	HYDROLO( Wetland Hydr Primary Indicat Surface W	GY rology Indicators: ttors (minimum of or Vater (A1)		d; check all that appl	ly) t (B11)			Water N Sedimer	arks (B1)(Riverine) at Deposits (B2)(Riverine)
Drift Deposits (B3)(Nonriverine)	HYDROLOG Wetland Hydr Primary Indicat Surface W High Wate	GY rology Indicators: ators (minimum of on Vater (A1) er Table (A2)		d; check all that appl Salt Crust Biotic Cru	ly) t (B11) <b>ust (B12)</b>	(B13)		Water N Sedimer	arks (B1)(Riverine) at Deposits (B2)(Riverine)
Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C8) Saturation visible on Aerial Imagery (C9) Water-Stained Leaves (B9) Shallow Aquatard (D3) FAC-Neutral Test (D5)  Field Observations: Surface Water Present? Yes No X Depth (inches): Water Table Present? Yes No x Depth (inches): Saturation Present? Yes No x Depth (inches): Saturation Present? Yes No x Depth (inches): Saturation Present? Yes No x Depth (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	HYDROLOG Wetland Hydr Primary Indicat Surface W High Wate Saturation	GY rology Indicators: stors (minimum of or Vater (A1) er Table (A2) n (A3)	ne required	d; check all that appl Salt Crust Biotic Cru Aquatic In	ly) t (B11) <b>ust (B12)</b> nvertebrates (	` '		Water N           Sedimer           Drift Dep	arks (B1)(Riverine)  It Deposits (B2)(Riverine)  It Desits (B3)(Riverine))
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes No X Depth (inches):  Water Table Present? Yes No x Depth (inches):  Saturation visible on Aerial Imagery (C9)  Shallow Aquatard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present?  Saturation visible on Aerial Imagery (C9)  Shallow Aquatard (D3)  FAC-Neutral Test (D5)	HYDROLOG Wetland Hydr Primary Indicat Surface W High Wate Saturation Water Ma	GY rology Indicators: ttors (minimum of or Vater (A1) er Table (A2) n (A3) arks (B1)(Nonriverine	ne required	d; check all that appl Salt Crust Biotic Cru Aquatic In Hydrogen	ly) t (B11) <b>ust (B12)</b> nvertebrates ( s Sulfide Odor	r (C1)	Roots (C3)	Water M Sedimer Drift Dep Drainage	arks (B1)(Riverine) at Deposits (B2)(Riverine) assits (B3)(Riverine)) at Patterns (B10)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) (C9)  Water-Stained Leaves (B9) Shallow Aquatard (D3)  FAC-Neutral Test (D5)  Field Observations:  Surface Water Present? Yes No _X _ Depth (inches): Wetland Hydrology  Saturation Present? Yes No _x _ Depth (inches): Hydrology  Saturation Present? Yes No _x _ Depth (inches): Present?  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	HYDROLOG Wetland Hydr Primary Indicar Surface W High Water Saturation Water Mai	GY rology Indicators: ttors (minimum of or Vater (A1) er Table (A2) n (A3) arks (B1)(Nonriverine Deposits (B2)(Nonri	ne required e) riverine)	d; check all that appl Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized F	t (B11) ust (B12) overtebrates ( Sulfide Odoi	r (C1) s along Living	Roots (C3)	Water M Sedimer Drift Dep Drainage Dry Sea	arks (B1)(Riverine) at Deposits (B2)(Riverine) aosits (B3)(Riverine)) a Patterns (B10) son Water Table (C2)
Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes NoX _ Depth (inches): Water Table Present? Yes NoX _ Depth (inches): Saturation Present? Yes Nox _ Depth (inches): (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	HYDROLOG  Wetland Hydr Primary Indicat Surface W High Wate Saturation Water Mate Sediment Drift Depo	rology Indicators: stors (minimum of or Vater (A1) er Table (A2) n (A3) arks (B1)(Nonriverine Deposits (B2)(Nonriverine sits (B3)(Nonriverine	ne required e) riverine)	d; check all that appl Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized F	ly) t (B11) ust (B12) nvertebrates ( s Sulfide Odor Rhizospheres of Reduced	r (C1) s along Living Iron (C4)		Water M Sedimer Drift Dep Drainage Dry Sea	arks (B1)(Riverine)  It Deposits (B2)(Riverine)  Posits (B3)(Riverine))  Patterns (B10)  Son Water Table (C2)  Ck Surface (C7)
Field Observations:  Surface Water Present? Yes No _X Depth (inches): Water Table Present? Yes No _X Depth (inches): Hydrology Saturation Present? Yes No _x Depth (inches): Present?  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Wetland Hydr Primary Indicat Surface W High Wate Saturation Water Mate Sediment Drift Depo	rology Indicators: ators (minimum of or Vater (A1) er Table (A2) in (A3) arks (B1)(Nonriverine Deposits (B2)(Nonriverine sits (B3)(Nonriverine Goil Cracks (B6)	ne required e) riverine)	d: check all that appl Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized F Presence Recent Iro	ly) t (B11) ust (B12) nvertebrates ( s Sulfide Odor Rhizospheres of Reduced on Reduction	r (C1) s along Living Iron (C4) in Tilled Soils		Water M Sedimer Drift Dep Drainage Dry Sea Thin Mu Crayfish Saturati	arks (B1)(Riverine)  It Deposits (B2)(Riverine)  Posits (B3)(Riverine))  Patterns (B10)  Son Water Table (C2)  Ck Surface (C7)  Burrows (C8)
Surface Water Present? Yes No X Depth (inches):  Water Table Present? Yes No X Depth (inches):  Saturation Present? Yes No x Depth (inches):  (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Wetland Hydr Primary Indicat Surface W High Wate Saturation Water Mate Sediment Drift Depo Surface S Inundation	rology Indicators: stors (minimum of or Vater (A1) er Table (A2) n (A3) arks (B1)(Nonriverine E Deposits (B2)(Nonriverine Soil Cracks (B6) n Visible on Aerial In	ne required e) riverine)	d: check all that appl Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized F Presence Recent Iro	ly) t (B11) ust (B12) nvertebrates ( s Sulfide Odor Rhizospheres of Reduced on Reduction	r (C1) s along Living Iron (C4) in Tilled Soils		Water M Sedimer Drift Dep Drainage Dry Sea Thin Mu Crayfish Saturati (C9)	arks (B1)(Riverine)  It Deposits (B2)(Riverine)  It Deposits (B3)(Riverine))  It Patterns (B10)  It Patterns
Surface Water Present? Yes No X Depth (inches):  Water Table Present? Yes No X Depth (inches):  Saturation Present? Yes No x Depth (inches):  (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Wetland Hydr Primary Indicat Surface W High Wate Saturation Water Mate Sediment Drift Depo Surface S Inundation	rology Indicators: stors (minimum of or Vater (A1) er Table (A2) n (A3) arks (B1)(Nonriverine Deposits (B2)(Nonriverine Soil Cracks (B6) n Visible on Aerial In	ne required e) riverine)	d: check all that appl Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized F Presence Recent Iro	ly) t (B11) ust (B12) nvertebrates ( s Sulfide Odor Rhizospheres of Reduced on Reduction	r (C1) s along Living Iron (C4) in Tilled Soils		Water M Sedimer Drift Dep Drainage Dry Sea Thin Mu Crayfish Saturati (C9) Shallow	arks (B1)(Riverine) at Deposits (B2)(Riverine) assits (B3)(Riverine)) at Patterns (B10) at Patterns (B10) at Patterns (B10) at Patterns (C2) at Surface (C7) Burrows (C8) at Patterns (C8) at Pat
Water Table Present? Yes No X Depth (inches): Hydrology Present?  Saturation Present? Yes No x Depth (inches): Present?  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	HYDROLO  Wetland Hydr Primary Indica Surface W High Water Saturation Water Ma Sediment Drift Depo Surface S Inundatior Water-Sta	GY rology Indicators: ators (minimum of on Vater (A1) er Table (A2) in (A3) arks (B1)(Nonriverine is Deposits (B2)(Nonriverine soil Cracks (B6) in Visible on Aerial In pained Leaves (B9)	ne required e) riverine)	d: check all that appl Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized F Presence Recent Iro	ly) t (B11) ust (B12) nvertebrates ( s Sulfide Odor Rhizospheres of Reduced on Reduction	r (C1) s along Living Iron (C4) in Tilled Soils		Water M Sedimer Drift Dep Drainage Dry Sea Thin Mu Crayfish Saturati (C9) Shallow	arks (B1)(Riverine) at Deposits (B2)(Riverine) assits (B3)(Riverine)) at Patterns (B10) at Patterns (B10) at Patterns (B10) at Patterns (C2) at Surface (C7) Burrows (C8) at Patterns (C8) at Pat
Saturation Present? Yes No x Depth (inches): Hydrology Present?  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	HYDROLOG  Wetland Hydr Primary Indicat Surface W High Wate Saturation Water Mate Sediment Drift Depo Surface S Inundation Water-Sta	GY rology Indicators: stors (minimum of or Vater (A1) er Table (A2) n (A3) arks (B1)(Nonriverine coits (B2)(Nonriverine coits (B3)(Nonriverine coit Cracks (B6) n Visible on Aerial In ained Leaves (B9)	e) riverine) ne) magery (B	d; check all that applications and control of the c	ly) t (B11) ust (B12) nvertebrates ( s Sulfide Odor Rhizospheres of Reduced on Reduction	r (C1) s along Living Iron (C4) in Tilled Soils		Water M Sedimer Drift Dep Drainage Dry Sea Thin Mu Crayfish Saturati (C9) Shallow	arks (B1)(Riverine) at Deposits (B2)(Riverine) assits (B3)(Riverine)) at Patterns (B10) at Patterns (B10) at Patterns (B10) at Patterns (C2) at Surface (C7) Burrows (C8) at Patterns (C8) at Pat
Saturation Present? Yes No _x Depth (inches): Present?  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	HYDROLOG  Wetland Hydr Primary Indicat Surface W High Wate Saturation Water Mate Sediment Drift Depo Surface S Inundation Water-Sta	GY rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) arks (B1)(Nonriverine E Deposits (B2)(Nonriverine Soil Cracks (B6) n Visible on Aerial In ained Leaves (B9)  vations: er Present? Ye	e) riverine) magery (B	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized F Presence Recent Iro Other (Exp	ly) t (B11) ust (B12) nvertebrates ( Sulfide Odor Rhizospheres of Reduced I on Reduction plain in Rema	r (C1) s along Living Iron (C4) in Tilled Soils	(C6)	Water M Sedimer Drift Dep Drainage Dry Sea Thin Mu Crayfish Saturati (C9) Shallow FAC-Ne	arks (B1)(Riverine)  It Deposits (B2)(Riverine)  It Deposits (B3)(Riverine))  It Patterns (B10)  It Patterns
	HYDROLOG  Wetland Hydr Primary Indicat Surface W High Wate Saturation Water Mate Sediment Drift Depo Surface S Inundation Water-Sta	GY rology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) arks (B1)(Nonriverine E Deposits (B2)(Nonriverine Soil Cracks (B6) n Visible on Aerial In ained Leaves (B9)  vations: er Present? Ye	e) riverine) magery (B	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized F Presence Recent Iro Other (Exp	ly) t (B11) ust (B12) nvertebrates ( Sulfide Odor Rhizospheres of Reduced I on Reduction plain in Rema	r (C1) s along Living Iron (C4) in Tilled Soils	(C6)	Water M Sedimer Drift Dep Drainage Dry Sea Thin Mu Crayfish Saturati (C9) Shallow FAC-Ne	arks (B1)(Riverine)  It Deposits (B2)(Riverine)  It Deposits (B3)(Riverine))  It Patterns (B10)  It Patterns
	Wetland Hydr Primary Indicat Surface W High Water Saturation Water Man Sediment Drift Depo Surface S Inundation Water-Sta	rology Indicators: stors (minimum of or Vater (A1) er Table (A2) in (A3) arks (B1)(Nonriverine Deposits (B2)(Nonriverine Coil Cracks (B6) in Visible on Aerial Ir ained Leaves (B9)  rations: er Present? Ye Present? Ye esent? Ye	e) riverine) ne) magery (B	d: check all that appl Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized F Presence Recent Irc 7) Other (Exp	ly) t (B11) ust (B12) nvertebrates ( s Sulfide Odor Rhizospheres of Reduced on Reduction plain in Rema	r (C1) s along Living Iron (C4) in Tilled Soils	(C6)  Wetland Hydrology	Water M Sedimer Drift Dep Drainage Dry Sea Thin Mu Crayfish Saturati (C9) Shallow FAC-Ne	arks (B1)(Riverine)  It Deposits (B2)(Riverine)  It Deposits (B3)(Riverine))  It Patterns (B10)  It Patterns
	HYDROLOG  Wetland Hydr Primary Indicar Surface W High Water Saturation Water Ma Sediment Drift Depo Surface S Inundatior Water-Sta  Field Observ Surface Water Water Table F Saturation Pre (includes capi	rology Indicators: ators (minimum of on Vater (A1) er Table (A2) in (A3) arks (B1)(Nonriverine is Deposits (B2)(Nonriverine is Dejosits (B3)(Nonriverine Soil Cracks (B6) in Visible on Aerial In pained Leaves (B9)  vations: er Present? Present? Ye esent? Ye esent? Ye esent? Ye esent?	ne required e) riverine) ne) magery (B:	d; check all that apply Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized F Presence Recent Irc  7) Other (Exp	dy)  t (B11)  ust (B12)  nvertebrates ( a Sulfide Odor  Rhizospheres  on Reduction  plain in Rema  (inches):  (inches):  (inches):	r (C1) s along Living Iron (C4) in Tilled Soils arks)	Wetland Hydrology Present?	Water M Sedimer Drift Dep Drainage Dry Sea Thin Mu Crayfish Saturati (C9) Shallow FAC-Ne	arks (B1)(Riverine)  It Deposits (B2)(Riverine)  It Deposits (B3)(Riverine))  It Patterns (B10)  It Patterns
	HYDROLOG  Wetland Hydr Primary Indicar Surface W High Water Saturation Water Ma Sediment Drift Depo Surface S Inundatior Water-Sta  Field Observ Surface Water Water Table F Saturation Pre (includes capi	rology Indicators: ators (minimum of on Vater (A1) er Table (A2) in (A3) arks (B1)(Nonriverine is Deposits (B2)(Nonriverine is Dejosits (B3)(Nonriverine Soil Cracks (B6) in Visible on Aerial In pained Leaves (B9)  vations: er Present? Present? Ye esent? Ye esent? Ye esent? Ye esent?	ne required e) riverine) ne) magery (B:	d; check all that apply Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized F Presence Recent Irc  7) Other (Exp	dy)  t (B11)  ust (B12)  nvertebrates ( a Sulfide Odor  Rhizospheres  on Reduction  plain in Rema  (inches):  (inches):  (inches):	r (C1) s along Living Iron (C4) in Tilled Soils arks)	Wetland Hydrology Present?	Water M Sedimer Drift Dep Drainage Dry Sea Thin Mu Crayfish Saturati (C9) Shallow FAC-Ne	arks (B1)(Riverine)  It Deposits (B2)(Riverine)  It Deposits (B3)(Riverine))  It Patterns (B10)  It Patterns
	HYDROLOG  Wetland Hydr Primary Indicar Surface W High Water Saturation Water Man Sediment Drift Depo Surface S Inundation Water-Star  Field Observ Surface Water Water Table F Saturation Pre (includes capi	rology Indicators: ators (minimum of on Vater (A1) er Table (A2) in (A3) arks (B1)(Nonriverine is Deposits (B2)(Nonriverine is Dejosits (B3)(Nonriverine Soil Cracks (B6) in Visible on Aerial In pained Leaves (B9)  vations: er Present? Present? Ye esent? Ye esent? Ye esent? Ye esent?	ne required  e) riverine) ne) magery (B') ss ss gauge, m	check all that appl Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized F Presence Recent Irc  7) Other (Exp No X Depth No X Depth No x Depth No x Depth Onitoring well, aerial	dy)  t (B11)  ust (B12)  nvertebrates ( a Sulfide Odor  Rhizospheres  on Reduction  plain in Rema  (inches):  (inches):  (inches):	r (C1) s along Living Iron (C4) in Tilled Soils arks)	Wetland Hydrology Present?	Water M Sedimer Drift Dep Drainage Dry Sea Thin Mu Crayfish Saturati (C9) Shallow FAC-Ne	arks (B1)(Riverine)  It Deposits (B2)(Riverine)  It Deposits (B3)(Riverine))  It Patterns (B10)  It Patterns

#### WETLAND DETERMINATION DATA FORM – Arid West Region

Idaho Transportation			Counties Sampling Point:		10/01/2010
			19, T4N, R2W		
Valley	<u>_</u>	•			
Landform (hillslope, terrace, etc.): Bottom Snake River	Local relief	(concave, convex	, none): Flat	Slope (%):	<1%
Subregion (LRR): Basin (LRR B)	Lat: <u>43.6</u>	62 L	_ong:116.628	Datum:	
Soil Map Unit Name:		NWI classifi	cation: upland		
Are climatic / hydrologic conditions on the site typical for this tin	ne of year? Y	es <u>Y</u> No	(If no, ex	kplain in Remarks	s.)
Are Vegetation X Soil or Hydrology	significantly d	isturbed? Are "	Normal Circumstances	s" present? Ye	es <u>X</u> No
Are Vegetation Soil or Hydrology	naturally probl	ematic? (If nee	eded, explain any ans	wers in Remarks.	)
SUMMARY OF FINDINGS – Attach site map sho	owing sampli	ing point loca	tions, transects,	important fe	atures, etc.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	IS tr	ne Sampled Area nin a Wetland?		No X	-
VEGETATION – Use scientific names of plants.					,
	lute % Dominar over Species		Dominance Test w Number of Domina that are OBL, FAC	nt Species	2 (A)
3. 4.			Total Number of Do Species Across All	ominant	2 (B)
	=Total Cov	/er	Percent of Dominar	nt Species	
Sapling/Shrub Stratum (Plot size: ) 1.			that are OBL, FAC		100 (A/B)
2			Prevalence Index	worksheet:	
3. 4.		<del></del>	Total % Cover of:		Multiply by:
5			OBL species		·
Herb Stratum (Plot size: 15' diam.)	= Total Co	ver	FACW species FAC species FACU species UPL species	x 2 = x 3 = x 4 = x 5 =	
1. Poa sp. 2	25 n*	(FACU)	Column Totals:	(A)	(B)
	15 n	FACW			
	30 Y 30 Y	FAC FAC	Prevalence In	ndex = B/A =	
5	-	<del></del>	Hydrophytic Vege	tation Indicators	S:
6.			Dominar	nce Test is >50%	
7			Prevalen	ice Index is ≤3.0 <sup>1</sup>	
8			data in Re	gical Adaptations emarks or on a se Non-Vascular Pla	• .
11				c soil and wetland	'egetation <sup>1</sup> (Explain) I hydrology must be natic.
Woody Vine Stratum (Plot size: _) 1 2			Hydrophytic Vegetation Present?	Yes	No X
W Dans Crowned in 11-th Ottobury C	= Total Co				
% Bare Ground in Herb Stratum: 0 % Co Remarks: Sample plot located within reed canarygrass growth	ver Biotic Crust:	sion			
33 - 33 - 3	,				

SOIL Sampling Point: SP-04

Depth	Matrix			R	edox Features	3		
(inches) 0-18+	Color (moist) 10YR 4/2	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture Si Im	Remarks Few, fine 10YR5/6 redox soils Stiff (compacted?).
Hydric Soil Ind Histosol Histic Ep Black Hi	dicators: (Applica		Strippe Loamy	rwise noted Redox (S5) ed Matrix (S6	6) eral (F1) ( <b>exce</b>		Indicato 1 5	=Pore Lining, M=Matrix.  rs for Problematic Hydric Soils³: cm Muck (A9)(L,RR C) cm Muck (A10)(LRR C) Reduced Vertic (F18) Red Parent Material (TF2)
Stratifie 1 cm Mu Depleted Thick Da Sandy M	ed Layers (A5)(LRF uck (A9)(LRR D) d Below Dark Surfa ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4)	·	Deplet Redox Deplet X Redox	ted Matrix (F Dark Surface ted Dark Sur Depression Pools (F9)	3) ce (F6) face (F7)		<sup>3</sup> Indicato wetland	Other (Explain in Remarks)  ors of hydrophytic vegetation and hydrology must be present, unless d or problematic.
Restrictive La Type:	yer (if present):					Hydrid Prese		<del></del>
Surfa	ace flat (i.e. no hum		r than adjacent area ruts)	IS.				
Surfa HYDROLOG Wetland Hydro	GY ology Indicators:	mocks or r					Secondary	Indicators (2 or more required)
Surfa HYDROLOG Wetland Hydro	GY ology Indicators: tors (minimum of or	mocks or r	ruts)	y)				Indicators (2 or more required) r Marks (B1)(Riverine)
Surfa HYDROLOG Wetland Hydro Primary Indicat Surface W	GY ology Indicators: tors (minimum of or	mocks or r	ruts)	y) : (B11)			Wate	
Surfa HYDROLOG Wetland Hydro Primary Indicat Surface W	GY  ology Indicators: tors (minimum of or /ater (A1) er Table (A2)	mocks or r	ruts)  I; check all that appl  Salt Crust  Biotic Crust	y) : (B11)	(B13)		Wate Sedin	r Marks (B1)(Riverine)
HYDROLOG Wetland Hydro Primary Indicat Surface W High Wate Saturation	GY  ology Indicators: tors (minimum of or /ater (A1) er Table (A2)	mocks or r	ruts)  I; check all that appl  Salt Crust  Biotic Cru  Aquatic In	y) : (B11) ust <b>(B12)</b>	. ,		Wate Sedin	r Marks (B1)(Riverine) nent Deposits (B2)(Riverine)
HYDROLOG Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mar	GY ology Indicators: tors (minimum of or /ater (A1) er Table (A2)	mocks or r	ruts)  I; check all that appl Salt Crust Biotic Cru Aquatic In Hydrogen	y) : (B11) ust (B12) ivertebrates Sulfide Odo	. ,	Roots (C3)	Wate Sedin Drift [	r Marks (B1)(Riverine) nent Deposits (B2)(Riverine) Deposits (B3)(Riverine))
HYDROLOG Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mai	GY  ology Indicators: tors (minimum of or /ater (A1) er Table (A2) I (A3) rks (B1)(Nonriverine	ne required	l; check all that appl Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized	y) : (B11) ust (B12) ivertebrates Sulfide Odo	or (C1) s along Living	Roots (C3)	Wate Sedin Drift D Drain Dry S	r Marks (B1)(Riverine) nent Deposits (B2)(Riverine) Deposits (B3)(Riverine)) age Patterns (B10)
HYDROLOG Wetland Hydromary Indicate Surface Working High Water Saturation Water Man Sediment Drift Depo	GY  ology Indicators: tors (minimum of or /ater (A1) er Table (A2) (A3) rks (B1)(Nonriverine Deposits (B2)(Nonr	ne required	suts)    check all that apple	y) : (B11) ust (B12) ivertebrates Sulfide Odo Rhizosphere of Reduced	or (C1) s along Living		Wate Sedin Drift [ Drain. Dry S Thin I	r Marks (B1)(Riverine) nent Deposits (B2)(Riverine) Deposits (B3)(Riverine)) age Patterns (B10) eason Water Table (C2) Muck Surface (C7) ish Burrows (C8)
Wetland Hydro Primary Indicat Surface Working High Water Saturation Water Man Sediment Drift Depo X Surface So	ology Indicators: tors (minimum of or /ater (A1) er Table (A2) (A3) rks (B1)(Nonriverine Deposits (B2)(Nonriverine sits (B3)(Nonriverine	ne required  e) riverine)	suts)    check all that apple	y) : (B11) ust (B12) ivertebrates Sulfide Odo Rhizosphere of Reduced	or (C1) s along Living Iron (C4) n in Tilled Soils		Sedin Drift I Drain Dry S Thin I Crayf Satur (C9) Shallo	r Marks (B1)(Riverine) nent Deposits (B2)(Riverine) Deposits (B3)(Riverine)) age Patterns (B10) eason Water Table (C2) Muck Surface (C7)
Wetland Hydro Primary Indicat Surface Working High Water Saturation Water Man Sediment Drift Depo X Surface So	ology Indicators: tors (minimum of or /ater (A1) er Table (A2) (A3) rks (B1)(Nonriverine beposits (B2)(Nonriverine cil Cracks (B6) Visible on Aerial Ir ined Leaves (B9)	ne required  e) riverine)	suts)    check all that apple	y) (B11) ust (B12) evertebrates Sulfide Odo Rhizosphere of Reduced on Reduction	or (C1) s along Living Iron (C4) n in Tilled Soils		Sedin Drift I Drain Dry S Thin I Crayf Satur (C9) Shallo	r Marks (B1)(Riverine) nent Deposits (B2)(Riverine) Deposits (B3)(Riverine)) age Patterns (B10) eason Water Table (C2) Muck Surface (C7) ish Burrows (C8) ation visible on Aerial Imagery
HYDROLOG  Wetland Hydre Primary Indicat Surface W High Water Saturation Water Man Sediment Drift Depo X Surface So Inundation Water-Sta	ology Indicators: tors (minimum of or /ater (A1) er Table (A2) (A3) rks (B1)(Nonriverine beposits (B2)(Nonriverine cilc Cracks (B6) a Visible on Aerial Ir ined Leaves (B9)	ne required e) riverine) ne)	suts)    check all that apple	y) (B11) ust (B12) evertebrates Sulfide Odo Rhizosphere of Reduced on Reduction plain in Rem	or (C1) s along Living Iron (C4) n in Tilled Soils aarks)		Wate Sedin Drift I Drain Dry S Thin I Crayf Satur (C9) Shallo	r Marks (B1)(Riverine) nent Deposits (B2)(Riverine) Deposits (B3)(Riverine)) age Patterns (B10) eason Water Table (C2) Muck Surface (C7) ish Burrows (C8) ation visible on Aerial Imagery
Surface Wetland Hydroprimary Indicate Surface Wetland Water Mark Sediment Drift Depo X Surface Sediment Water-Sta	ology Indicators: tors (minimum of or /ater (A1) er Table (A2) (A3) rks (B1)(Nonriverine sits (B3)(Nonriverine oil Cracks (B6) n Visible on Aerial Ir ined Leaves (B9) ations: r Present? Ye	ne required  e) riverine) ne) magery (B)	Salt Crust  Salt Crust  Biotic Cru  Aquatic In  Hydrogen  Oxidized  Presence  Recent Ird  Other (Ex	y) ust (B12) evertebrates Sulfide Odo Rhizosphere of Reduced on Reduction plain in Rem	or (C1) s along Living Iron (C4) n in Tilled Soils narks)	s (C6)	Wate Sedin Drift I Drain Dry S Thin I Crayf Satur (C9) Shallo	r Marks (B1)(Riverine) nent Deposits (B2)(Riverine) Deposits (B3)(Riverine)) age Patterns (B10) eason Water Table (C2) Muck Surface (C7) ish Burrows (C8) ation visible on Aerial Imagery ow Aquatard (D3) Neutral Test (D5)
HYDROLOG  Wetland Hydre Primary Indicat Surface W High Water Saturation Water Man Sediment Drift Depo X Surface Se Inundation Water-Sta  Field Observe	ology Indicators: tors (minimum of or /ater (A1) or Table (A2) ologosits (B1)(Nonriverine Deposits (B2)(Nonriverine oil Cracks (B6) of Visible on Aerial In ined Leaves (B9)  ations: r Present? Ye esent? Ye	mocks or required  e) riverine) ne magery (B7	struts)    Check all that apple	y)  (B11)  ust (B12)  vertebrates  Sulfide Odo  Rhizosphere  of Reduced  on Reduction  plain in Rem  (inches):	or (C1) ss along Living Iron (C4) n in Tilled Soils narks)	s (C6)	Wate Sedin Drift I Drain Dry S Thin I Crayf Satur (C9) Shallo	r Marks (B1)(Riverine) nent Deposits (B2)(Riverine) Deposits (B3)(Riverine)) age Patterns (B10) eason Water Table (C2) Muck Surface (C7) ish Burrows (C8) ation visible on Aerial Imagery ow Aquatard (D3) Neutral Test (D5)
HYDROLOG  Wetland Hydre Primary Indicat Surface W High Water Saturation Water Man Sediment Drift Depo X Surface Se Inundation Water-Sta  Field Observet Surface Water Water Table F Saturation Pre (includes capi	ology Indicators: tors (minimum of or /ater (A1) er Table (A2) (A3) rks (B1)(Nonriverine oil Cracks (B6) n Visible on Aerial Ir ined Leaves (B9)  ations: r Present? Ye esent? Ye ellary fringe)	mocks or required  e) riverine) ne agery (B7	Salt Crust  Salt Crust  Biotic Cru  Aquatic In  Hydrogen  Oxidized In  Presence  Recent Ind  Other (Ex  No X Depth  No X Depth	y)  (B11)  ust (B12)  evertebrates Sulfide Odo Rhizosphere of Reduced on Reduction plain in Rem  (inches): (inches):	or (C1) s along Living Iron (C4) n in Tilled Soils narks)	Wetland Hydrology Present?	Wate Sedin Drift I Drain: Dry S Thin I Crayf Satur (C9) Shallo FAC-	r Marks (B1)(Riverine) nent Deposits (B2)(Riverine) Deposits (B3)(Riverine)) age Patterns (B10) eason Water Table (C2) Muck Surface (C7) ish Burrows (C8) ation visible on Aerial Imagery ow Aquatard (D3) Neutral Test (D5)
HYDROLOG  Wetland Hydre Primary Indicate Surface Wetland Water Man Sediment Drift Depo X Surface Sediment Water-State  Field Observet Surface Water Water Table F Saturation Precincludes capi	ology Indicators: tors (minimum of or /ater (A1) er Table (A2) er (A3) er (B1)(Nonriverine Deposits (B2)(Nonriverine oil Cracks (B6) er Visible on Aerial Ir er (B1) er (B2) er (B2) er (B3) er (B3) er (B3) er (B3) er (B4) e	mocks or required  e) riverine)  magery (B7  s s gauge, magery mocks or representations or represe	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized In Presence Recent Ird Other (Ex  No X Depth No X Depth No X Depth	y)  (B11)  ust (B12)  overtebrates  Sulfide Odo  Rhizosphere of Reduced on Reduction  plain in Rem  (inches):  (inches):  (inches):  photos, pre	vious inspection	Wetland Hydrology Present?	Wate Sedin Drift I Drain: Dry S Thin I Crayf Satur (C9) Shallo FAC-	r Marks (B1)(Riverine) nent Deposits (B2)(Riverine) Deposits (B3)(Riverine)) age Patterns (B10) eason Water Table (C2) Muck Surface (C7) ish Burrows (C8) ation visible on Aerial Imagery ow Aquatard (D3) Neutral Test (D5)

#### WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: US Hwy 20-26 Corridor Preservation Idaho Transportation Applicant/Owner: Dept./COMPASS		_		Counties  Sampling Point:		10/01/2010	_
		<u>-</u>		Sec 20, T4N, R2W			_
Valley			_				
Landform (hillslope, terrace, etc.): Bottom Snake River	<u> </u>			none): Flat			_
Subregion (LRR): Basin (LRR B)					Datum:		_
Soil Map Unit Name:			_ NWI classific	cation: <u>upland</u>			_
Are climatic / hydrologic conditions on the site typical	for this time of y	ear? Yes	_X No	(If no, e	xplain in Remark	s.)	
Are Vegetation X Soil or Hydrolog	y sig	nificantly distu	rbed? Are "I	Normal Circumstance	s" present? You	es <u>X</u> No _	_
Are Vegetation Soil or Hydrology	, nat	turally problema	atic? (If nee	eded, explain any ans	wers in Remarks	.)	
SUMMARY OF FINDINGS – Attach site r	<u> </u>	g sampling	point loca	tions, transects	important fe	atures, etc.	
	No X	Is the S	Sampled Area				
	No X	within a	a Wetland?		No X	-	
Wetland Hydrology Present? Yes	No X						
<b>VEGETATION</b> – Use scientific names of	plants.						
<u>Tree Stratum</u> (Plot size:_) 1	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test	nt Species		
2.				that are OBL, FAC	W, or FAC:	1 (A)	
3. 4.				Total Number of D Species Across All		1 (B)	
		=Total Cover		Percent of Domina	nt Species		
Sapling/Shrub Stratum (Plot size: )  1		_		that are OBL, FAC		100 (A/B)	
2				Prevalence Index	workshoot:		
3.				Total % Cover of:		Multiply by	,.
5.		-		OBL species	x 1 :		•
-		-		FACW species	x 2		_
		= Total Cover		FAC species FACU species	70 x 3 :	= 210	_
Herb Stratum (Plot size: 15' diam.)				UPL species	10 x 5	= <u>60</u> = 50	_
Lactuca serriola	15	N	FACU	Column Totals:	95 (A)	320	(B)
2. Tanacetum vulgare	5	N	NI TAG		. 54	0.07	
Festuca arundinacea     Brassica campestris	<u>70</u> 5	Y N	FAC UPL	Prevalence I	ndex = B/A =	3.37	_
Hypericum perforatum		N	UPL	Hydrophytic Vege	etation Indicator	s:	
6.		-		Y Dominan	ce Test is >50%		
7.				N Prevalen	ce Index is ≤3.0 <sup>1</sup>		
8					gical Adaptations		oorting
9					emarks or on a s Non-Vascular Pla		
10					atic Hydrophytic \		oloin)
11	<del></del> -			<sup>1</sup> Indicators of hydri			
	100	= Total Cover		present, unless dis			0.00
Woody Vine Stratum (Plot size: _) 1.				Hydrophytic Vegetation	Yes	No 2	X
2.				Present?			
		· · <del></del>					
		_ T-+-! C					
		_= Total Cover					
% Bare Ground in Herb Stratum: Remarks: Determination based on "Prevalence Index	% Cover Bi	_	· ·				

SOIL Sampling Point: SP-05

Profile Descrip	tion: (Describe t	o the depth	n needed to docur	nent the ind	licator or con	firm the abser	nce of indicat	ors.)
Depth	Matrix			R	edox Features	5		
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	 Remarks
0-3	10YR 4/3			,,,			Silm	
3-16+	10YR4/2		-				Silm	No mottles
								_
	· <del></del>							
¹Type: C=Conc	entration D=Deni	etion RM=F	Reduced Matrix, CS	S=Covered o	r Coated San	d Grains	l ocation: PI :	=Pore Lining, M=Matrix.
	•					a Gramo.		s for Problematic Hydric Soils <sup>3</sup> :
Histosol		ible to all L	RRs, unless other	Redox (S5)				cm Muck (A9)(L,RR C)
	ipedon (A2)			ed Matrix (S6				cm Muck (A10)(LRR C)
Black His	. , ,			`	eral (F1) ( <b>exce</b>	ant MI RA 1)		educed Vertic (F18)
	n Sulfide (A4)			Gleyed Mat		principality		ed Parent Material (TF2)
	d Layers (A5)(LR	R C)		ed Matrix (F				ther (Explain in Remarks)
	ck (A9)(LRR D)	,		Dark Surfac			· ·	and (Explain in tername)
	Below Dark Surfa	ce (A11)		ed Dark Sur	` ,		2	
· ·	rk Surface (A12)	,		Depression				s of hydrophytic vegetation and ydrology must be present, unless
Sandy M	ucky Mineral (S1)		Vernal	Pools (F9)	` ,			or problematic.
Sandy G	leyed Matrix (S4)							
Restrictive Lay	er (if present):							
Type:						Hydric	.40	
Depth (inches):						Preser	<sup>1τ</sup> ? No	<u>X</u>
HYDROLOG								
	logy Indicators:	ne required:	check all that appl	v)			Secondary	Indicators (2 or more required)
Surface Wa			Salt Crust					Marks (B1)(Riverine)
	r Table (A2)		Biotic Cru	, ,			·	ent Deposits (B2)(Riverine)
Saturation				vertebrates	(B13)		Drift D	eposits (B3)(Riverine))
Water Mark	ks (B1)(Nonriverin	e)	Hydrogen	Sulfide Odo	r (C1)		 Draina	ge Patterns (B10)
Sediment D	Deposits (B2)(Non	riverine)	Oxidized F	Rhizosphere	s along Living	Roots (C3)	Dry Se	ason Water Table (C2)
Drift Depos	sits (B3)(Nonriverir	ne)	Presence	of Reduced	Iron (C4)		Thin M	luck Surface (C7)
Surface So	oil Cracks (B6)		Recent Iro	n Reduction	in Tilled Soils	s (C6)		sh Burrows (C8)
							Satura	tion visible on Aerial Imagery
	Visible on Aerial I	magery (B7)	) Other (Ex	olain in Rem	arks)		(C9)	
Water-Stair	ned Leaves (B9)							w Aquatard (D3)
							FAC-N	leutral Test (D5)
Field Observa	itions:							
Surface Water		:S	No X Depth	(inches):				
Water Table Pi			No X Depth			Wetland	Yes	NoX
Saturation Pres						Hydrology Present?	100	
(includes capill			No X Depth	(inches)		Present		
Describe Reco	rded Data (stream	gauge, mo	nitoring well, aerial	photos, prev	vious inspection	ons), if available	e:	
Remarks: San	nple plot located in	apparent lo	owest point in field	outside of th	e irrigation dite	ches.		
Sha	allow irrigation dito	hes located	along perimeter of		J			
Gra	zed field - Upland							

#### WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: US Hwy 20-26 Corridor Preservation	City/Cour	nty: Ada & Canyon	Counties	Sampling Date:	10/01/2010
Applicant/Owner: Idaho Transportation Dept./COMPASS					
Investigator(s): C. MacLaren	Section,	Гownship, Range:	Sec. 21, T4N, R2W		
Valley Landform (hillslope, terrace, etc.): Snake River	Local reli	ef (concave, convex	, none): Flat	Slope (%)	: <1%
Subregion (LRR): Basin (LRR B)	Lat: <u>43</u>	3.664 L	_ong: <u>-116.580</u>	Datum:	
Soil Map Unit Name:		NWI classifi	cation: upland		
Are climatic / hydrologic conditions on the site typical for this time	e of year?	Yes Y No	(If no, e	xplain in Remark	s.)
Are Vegetation X Soil or Hydrology	significantly	disturbed? Are "	Normal Circumstance	s" present? Y	es X No
Are Vegetation Soil or Hydrology	_ naturally pro	blematic? (If ne	eded, explain any ans	wers in Remarks	S.)
SUMMARY OF FINDINGS – Attach site map sho	owing samp	oling point loca	tions, transects,	important fe	eatures, etc.
Hydrophytic Vegetation Present?         Yes         X         No           Hydric Soil Present?         Yes         No         X           Wetland Hydrology Present?         Yes         No         X	w	the Sampled Area ithin a Wetland?		No _ <b>X</b>	_
<b>VEGETATION</b> – Use scientific names of plants.					
1	ver Speci	es? Status	Dominance Test v Number of Domina that are OBL, FAC	nt Species	2 (A)
3.			,		(
4	=Total C		Total Number of D Species Across All		2 (B)
Sapling/Shrub Stratum (Plot size: ) 1.			Percent of Domina that are OBL, FAC		100 (A/B)
_					
2			Provalence Index	workshoot:	
2			Prevalence Index		Multiply by:
2			Total % Cover of:		Multiply by:
2					=
2			Total % Cover of: OBL species FACW species FAC species	x1 5 x2 85 x3	= 10 = 255
2			Total % Cover of: OBL species FACW species FAC species FACU species	x1	= 10 = 255 = 28
2	= Total (		Total % Cover of: OBL species FACW species FAC species	x 1 5 x 2 85 x 3 7 x 4	= 10 = 255 = 28 = 15
2.         3.         4.         5.         Herb Stratum (Plot size: 15' diam.)         1. Cichorium intybus       3         2. Cirsium vulgare       2	= Total (	Cover  UPL  FACU	Total % Cover of: OBL species FACW species FAC species FACU species UPL species Column Totals:	5 x 2 85 x 3 7 x 4 3 x 5 100 (A)	= 10 = 255 = 28 = 15 ) 308 (B)
2.         3.         4.         5.         Herb Stratum (Plot size: 15' diam.)         1. Cichorium intybus       3         2. Cirsium vulgare       2         3. Grindelia squarrosa       T	= Total (	Cover  UPL  FACU  FACU	Total % Cover of: OBL species FACW species FAC species FACU species UPL species Column Totals:	x1 x2 x3 x4 x5	= 10 = 255 = 28 = 15
2.         3.         4.         5.         Herb Stratum (Plot size: 15' diam.)         1. Cichorium intybus         2. Cirsium vulgare         3. Grindelia squarrosa         4. Trifolium repens	= Total 0	Cover  UPL FACU FACU FACU FAC	Total % Cover of: OBL species FACW species FAC species FACU species UPL species Column Totals:	x 1 5 x 2 85 x 3 7 x 4 3 x 5 100 (A)	= 10 = 255 = 28 = 15 308 (B)
2. 3. 4. 5. Herb Stratum (Plot size: 15' diam.) 1. Cichorium intybus 2. Cirsium vulgare 3. Grindelia squarrosa 4. Trifolium repens 5. Rumex acetosella	= Total (	UPL FACU FACU FAC FACU	Total % Cover of:  OBL species FACW species FAC species FACU species UPL species Column Totals:  Prevalence I	x 1 5 x 2 85 x 3 7 x 4 3 x 5 100 (A)	= 10 = 255 = 28 = 15 308 (B)
2.         3.         4.         5.         Herb Stratum (Plot size: 15' diam.)         1. Cichorium intybus       3         2. Cirsium vulgare       2         3. Grindelia squarrosa       T         4. Trifolium repens       2         5. Rumex acetosella       5         6. Festuca arundinacea       6	= Total (	Cover  UPL FACU FACU FACU FAC	Total % Cover of:  OBL species FACW species FAC species FACU species UPL species Column Totals:  Prevalence I  Hydrophytic Vege Y  Dominan	$ \begin{array}{c cccc}  & \times 1 \\ \hline 5 & \times 2 \\ \hline 85 & \times 3 \\ \hline 7 & \times 4 \\ \hline 3 & \times 5 \\ \hline 100 & (A) \end{array} $ $ \begin{array}{c cccc}  & \times 1 \\ \hline  & \times 2 \\ \hline  & \times 3 \\ \hline  & \times 5 \\ \hline  & \times 6 \\ \hline  & \times 7 \\ \hline $	= 10 = 255 = 28 = 15 308 (B)
2.         3.         4.         5.         Herb Stratum (Plot size: 15' diam.)         1. Cichorium intybus       3         2. Cirsium vulgare       2         3. Grindelia squarrosa       T         4. Trifolium repens       2         5. Rumex acetosella       5         6. Festuca arundinacea       6	= Total 0	DOVET  UPL FACU FACU FAC FAC FACU FACU FACU FACU F	Total % Cover of:  OBL species FACW species FAC species FACU species UPL species Column Totals:  Prevalence I  Hydrophytic Vege Y Dominan N Prevalen Morpholo	$ \begin{array}{c cccc}  & \times 1 \\ \hline 5 & \times 2 \\ \hline 85 & \times 3 \\ \hline 7 & \times 4 \\ \hline 3 & \times 5 \\ \hline 100 & (A) \end{array} $ $ \begin{array}{c cccc}  & \text{ration Indicator} \\  & \text{ce Test is } > 50\% \\  & \text{ce Index is } \le 3.0^1 \\  & \text{ogical Adaptation} $	=
2.         3.         4.         5.         Herb Stratum (Plot size: 15' diam.)         1. Cichorium intybus       3         2. Cirsium vulgare       2         3. Grindelia squarrosa       T         4. Trifolium repens       2         5. Rumex acetosella       5         6. Festuca arundinacea       6         7. Epilobium ciliatum       5         8.       9	= Total 0	DOVER  UPL FACU FACU FACU FAC FACW	Total % Cover of:  OBL species FACW species FAC species FACU species UPL species Column Totals:  Prevalence I  Hydrophytic Vege Y Dominan N Prevalen Morpholo data in R	$ \begin{array}{c c}  & \times 1 \\ \hline 5 & \times 2 \\ \hline 85 & \times 3 \\ \hline 7 & \times 4 \\ \hline 3 & \times 5 \\ \hline 100 & (A) \end{array} $ $ \begin{array}{c c}  & \times 1 \\ \hline 85 & \times 3 \\ \hline 7 & \times 4 \\ \hline 3 & \times 5 \\ \hline 100 & (A) \end{array} $ $ \begin{array}{c c}  & \times 1 \\ \hline 85 & \times 3 \\ \hline 9 & \times 4 \\ $	=
2.         3.         4.         5.         1.       Cichorium intybus         2.       Cirsium vulgare         3.       Grindelia squarrosa         4.       Trifolium repens         5.       Rumex acetosella         6.       Festuca arundinacea         7.       Epilobium ciliatum         8.       9.         10.       10.	= Total 0	DOVER  UPL FACU FACU FACU FAC FACW	Total % Cover of:  OBL species FACW species FAC species FACU species UPL species Column Totals:  Prevalence I  Hydrophytic Vege Y Dominan N Prevalen Morpholo data in R Wetland	$ \begin{array}{c c}  & \times 1 \\ \hline 5 & \times 2 \\ \hline 85 & \times 3 \\ \hline 7 & \times 4 \\ \hline 3 & \times 5 \\ \hline 100 & (A) \end{array} $ $ \begin{array}{c c}  & \text{rotation Indicator} \\  & \text{ce Test is } > 50\% \\  & \text{ce Index is } \leq 3.0^1 \\  & \text{ogical Adaptation} \\  & \text{emarks or on a s} \\  & \text{Non-Vascular Players} $	=
2.         3.         4.         5.         1.       Cichorium intybus         2.       Cirsium vulgare         3.       Grindelia squarrosa         4.       Trifolium repens         5.       Rumex acetosella         6.       Festuca arundinacea         7.       Epilobium ciliatum         8.       9.         10.       10.	= Total 0	DOVER  UPL FACU FACU FACU FAC FACW	Total % Cover of:  OBL species FACW species FAC species FACU species UPL species Column Totals:  Prevalence I  Hydrophytic Vege Y Dominan N Prevalen Morpholo data in R Wetland X Problema	$ \begin{array}{c c}  & \times 1 \\ \hline 5 & \times 2 \\ \hline 85 & \times 3 \\ \hline 7 & \times 4 \\ \hline 3 & \times 5 \\ \hline 100 & (A) \end{array} $ $ \begin{array}{c c}  & \text{ration Indicator} \\  & \text{ce Test is } > 50\% \\  & \text{ce Index is } \le 3.0^1 \\  & \text{original Adaptation} \\  & \text{emarks or on a s} \\  & \text{Non-Vascular Platic Hydrophytic Notation} \\  & \text{the Hydrophytic Notation} \\  & the Hydrophytic N$	=
2.         3.         4.         5.         1.       Cichorium intybus         2.       Cirsium vulgare         3.       Grindelia squarrosa         4.       Trifolium repens         5.       Rumex acetosella         6.       Festuca arundinacea         7.       Epilobium ciliatum         8.       9.         10.       10.	= Total 0	UPL FACU FACU FACU FACU FACU FACU FACU FACU	Total % Cover of:  OBL species FACW species FAC species FACU species UPL species Column Totals:  Prevalence I  Hydrophytic Vege Y Dominan N Prevalen Morpholo data in R Wetland X Problema	$ \begin{array}{c c}  & \times 1 \\ \hline 5 & \times 2 \\ \hline 85 & \times 3 \\ \hline 7 & \times 4 \\ \hline 3 & \times 5 \\ \hline 100 & (A) \end{array} $ $ \begin{array}{c c}  & \text{ration Indicator} \\  & \text{ce Test is >} 50\% \\  & \text{ce Index is $\leq$ 3.0}^1 \\  & \text{original Adaptation} \\  & \text{emarks or on a s} \\  & \text{Non-Vascular Platic Hydrophytic Notes is and wetlan} \\  & \text{coil and wetlan} \\  & \text{coil and wetlan} \\  \end{array} $	= 10 = 255 = 28 = 15 ) 308 (B) 3.08  rs:  s¹ (Provide supporting separate sheet) ants¹  Vegetation¹ (Explain) and hydrology must be
2. 3. 4. 5.  Herb Stratum (Plot size: 15' diam.)  1. Cichorium intybus 2. Cirsium vulgare 3. Grindelia squarrosa 4. Trifolium repens 5. Rumex acetosella 6. Festuca arundinacea 6. Festuca drundinacea 7. Epilobium ciliatum 8. 9. 10. 11.	= Total (	DOVER  UPL FACU FACU FAC FACU FAC FACW  COVER	Total % Cover of:  OBL species FACW species FAC species FACU species UPL species Column Totals:  Prevalence I  Hydrophytic Vege  Y Dominan N Prevalen  Morpholo data in R Wetland X Problema  1Indicators of hydri	$ \begin{array}{c c}  & \times 1 \\ \hline 5 & \times 2 \\ \hline 85 & \times 3 \\ \hline 7 & \times 4 \\ \hline 3 & \times 5 \\ \hline 100 & (A) \end{array} $ $ \begin{array}{c c}  & \text{ration Indicator} \\  & \text{ce Test is >} 50\% \\  & \text{ce Index is $\leq$ 3.0}^1 \\  & \text{original Adaptation} \\  & \text{emarks or on a s} \\  & \text{Non-Vascular Platic Hydrophytic Notes is and wetlan} \\  & \text{coil and wetlan} \\  & \text{coil and wetlan} \\  \end{array} $	= 10
2. 3. 4. 5.  Herb Stratum (Plot size: 15' diam.)  1. Cichorium intybus 2. Cirsium vulgare 3. Grindelia squarrosa 4. Trifolium repens 5. Rumex acetosella 6. Festuca arundinacea 6. Festuca arundinacea 7. Epilobium ciliatum 8. 9. 10. 11.	= Total (	UPL FACU FACU FAC FACU FAC FACW  Cover	Total % Cover of:  OBL species FACW species FAC species FACU species UPL species Column Totals:  Prevalence I  Hydrophytic Vege  Y  Dominan N  Prevalen  Morpholo data in R  Wetland X  Problema  Indicators of hydri present, unless dis  Hydrophytic Vegetation	$ \begin{array}{c c}  & \times 1 \\ \hline 5 & \times 2 \\ \hline 85 & \times 3 \\ \hline 7 & \times 4 \\ \hline 3 & \times 5 \\ \hline 100 & (A) \end{array} $ ndex = B/A =  etation Indicator ce Test is >50% ce Index is $\leq 3.0^{\circ}$ ogical Adaptation emarks or on a s Non-Vascular Plantic Hydrophytic Notes and wetland the sturbed or problem.	= 10 = 255 = 28 = 15 ) 308 (B) 3.08   rs:  s¹ (Provide supporting separate sheet) ants¹  Vegetation¹ (Explain) id hydrology must be matic.
2.	= Total 0  3 2 7 5 5 0 0 100 = Total 0	UPL FACU FACU FACU FAC FACV FAC Cover	Total % Cover of:  OBL species FACW species FAC species FACU species UPL species Column Totals:  Prevalence I  Hydrophytic Vege  Y  Dominan N  Prevalen  Morpholo data in R  Wetland X  Problema  Indicators of hydri present, unless dis  Hydrophytic Vegetation	$ \begin{array}{c c}  & \times 1 \\ \hline 5 & \times 2 \\ \hline 85 & \times 3 \\ \hline 7 & \times 4 \\ \hline 3 & \times 5 \\ \hline 100 & (A) \end{array} $ ndex = B/A =  etation Indicator ce Test is >50% ce Index is $\leq 3.0^{\circ}$ ogical Adaptation emarks or on a s Non-Vascular Plantic Hydrophytic Notes and wetland the sturbed or problem.	= 10 = 255 = 28 = 15 ) 308 (B) 3.08   rs:  s¹ (Provide supporting separate sheet) ants¹  Vegetation¹ (Explain) id hydrology must be matic.
2. 3. 4. 5.  Herb Stratum (Plot size: 15' diam.)  1. Cichorium intybus 2. Cirsium vulgare 3. Grindelia squarrosa 4. Trifolium repens 2. 5. Rumex acetosella 6. Festuca arundinacea 6. Festuca arundinacea 7. Epilobium ciliatum 8. 9. 10. 11.	= Total 0  3 2 7 5 5 0 0 100 = Total 0  ver Biotic Crus	UPL FACU FACU FACU FAC FACV FAC Cover	Total % Cover of:  OBL species FACW species FAC species FACU species UPL species Column Totals:  Prevalence I  Hydrophytic Vege  Y  Dominan N  Prevalen  Morpholo data in R  Wetland X  Problema  ¹Indicators of hydri present, unless dis  Hydrophytic Vegetation Present?	x 1 5 x 2 85 x 3 7 x 4 3 x 5 100 (A)  ndex = B/A =  etation Indicator ce Test is >50% ce Index is ≤3.0¹ ogical Adaptation emarks or on a s Non-Vascular Platic Hydrophytic \( \) ct soil and wetlan eturbed or problet  Yes X	= 10 = 255 = 28 = 15 ) 308 (B) 3.08  rs:  s¹ (Provide supporting separate sheet) ants¹ Vegetation¹ (Explain) and hydrology must be matic.

SOIL Sampling Point: SP-06

Depth	Matrix			R					
(inches)	Color (moist)  10YR 4/3	%	Color (moist)	%	edox Features Type <sup>1</sup>	Loc <sup>2</sup>	Texture Si Im	Remarks compacted	
3-20+	10YR4/3		·				Si Im	Fine si Im, loose/porous	
	_								
			-					_	
			-					-	
<sup>1</sup> Type: C=Con	centration, D=Depl	etion, RM	Reduced Matrix, C	S=Covered o	or Coated San	d Grains.	<sup>2</sup> Location: PL=	Pore Lining, M=Matrix.	
Hydric Soil Inc	dicators: (Applica	ble to all	LRRs, unless othe	rwise noted	.)		Indicators	s for Problematic Hydric Soils <sup>3</sup> :	
Histosol (A1) Sandy Redox (S5)						1 cm Muck (A9)(L,RR C)			
	Histic Epipedon (A2) Stripped Matrix (S6)					2 cm Muck (A10)(LRR C)			
	stic (A3)			Loamy Mucky Mineral (F1) (except MLRA 1) Reduced Vertic (F18)					
	en Sulfide (A4)			/ Gleyed Ma				ed Parent Material (TF2)	
	d Layers (A5)(LRF	R C)		ted Matrix (F			Ot	her (Explain in Remarks)	
<del></del>	uck (A9)(LRR D)	(0.4.4)		Dark Surfac	` ,				
	d Below Dark Surfa	ce (A11)		ted Dark Sur	` ,		<sup>3</sup> Indicators	of hydrophytic vegetation and	
	ark Surface (A12)			Depression Pools (F9)	S (F8)			ydrology must be present, unless	
	Mucky Mineral (S1)			11 0010 (1 0)			disturbed	or problematic.	
	Gleyed Matrix (S4) yer (if present):								
Type:	, o. ( p. 000).					Hydrid	Soil Yes	:	
Depth (inches):						Prese		X	
	o sl. Moist below 3								
HYDROLOG	GY ology Indicators:								
		ne require	d; check all that appl	y)			Secondary I	ndicators (2 or more required)	
Surface W	ater (A1)		Salt Crust	t (B11)			Water I	Marks (B1)(Riverine)	
High Wate	er Table (A2)		Biotic Cr	ust (B12)			Sediment Deposits (B2)(Riverine)		
Saturation	(A3)		Aquatic Ir	vertebrates	(B13)		Drift Deposits (B3)(Riverine))		
Water Mar	rks (B1)(Nonriverine	e)	Hydrogen	Sulfide Odo	r (C1)		Drainage Patterns (B10)		
Sediment	Deposits (B2)(Noni	riverine)					Dry Season Water Table (C2)		
Drift Depo	sits (B3)(Nonriverin	e)	Presence of Reduced Iron (C4)				Thin M	uck Surface (C7)	
Surface So	oil Cracks (B6)		Recent Ire	on Reduction	n in Tilled Soils	s (C6)	Crayfis	h Burrows (C8)	
In d a 4i a	. Maible on Apriel I	(D	7) Other (Fr	mlain in Dam				tion visible on Aerial Imagery	
	Nisible on Aerial Ir	nagery (b	/)Other (Ex	plain in Rem	laiks)		(C9)	Agustard (D2)	
water-sta	ined Leaves (B9)							Aquatard (D3)	
<u> </u>							FAC-N	eutral Test (D5)	
Field Observa	ations:								
Surface Water	r Present? Ye	s	No X Depth	(inches):					
Water Table F			No X Depth			Wetland	Vec	NoX	
						Hydrology	165		
Saturation Pre (includes capil		s	No X Depth	(inches): _		Present?			
Describe Reco	orded Data (stream	gauge, m	onitoring well, aerial	photos, pre	vious inspection	ons), if availabl	e:		
Remarks: NE	of US 20/26 unnar	ned drive	vay. Ag. Field, slope	d s. towards	20/26. Heavil	y grazed.			
1									

## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: US Hwy 20-26 Corridor Preservation	City/County: Ada & Canyon Counties Sampling Date: 10/01/2010
Applicant/Owner: Idaho Transportation Dept./COMPASS	State: ID Sampling Point: SP-07
Investigator(s): C. MacLaren	Section, Township, Range: Sec 21, T4N, R2W
Landform (hillslope, terrace, etc.):  Snake River  Subregion (LRR): Basin (LRR B)	Local relief (concave, convex, none):       Flat       Slope (%):       <1%
Soil Map Unit Name:	
	of year? Yes Y No (If no, explain in Remarks.)
	significantly disturbed? Are "Normal Circumstances" present? Yes X No
<u> </u>	naturally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ving sampling point locations, transects, important features, etc.
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Is the Sampled Area within a Wetland?
VEGETATION – Use scientific names of plants.	
Tree Stratum (Plot size:_) 1 2. Absolute Cove	r Species? Status Dominance Test worksheet:  Number of Dominant Species
3. 4.	Total Number of Dominant Species Across All Strata:  1 (B)
	Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: 30' diam.)	that are OBL, FACW, or FAC:100 (A/B)
1. Rosa sp. (one bush) tr 2.	
3.	Prevalence Index worksneet:
4	Total % Cover of: Multiply by:
5	OBL species 10 x 1 = 10 FACW species 10 x 2 = 20
	= Total Cover FAC species 70 x 3 = 210
Herb Stratum (Plot size: 15' diam.)	FACU species x 4 = UPL species x 5 =
1. Polygonum hydropiper 10	OBL Column Totals: 90 (A) 240 (B)
2. Cichorium intybus tr	
<ol> <li>Agrostis sp. (resembles A. tenuis)</li> <li>Festuca arundinacea</li> <li>70</li> </ol>	<u>FAC</u> Prevalence Index = B/A = <u>2.67</u> FAC
5	Hydrophytic Vegetation Indicators:
6.	Dominance Test is > 500/
7	Y Prevalence Index is ≤3.01
8	Morphological Adaptations <sup>1</sup> (Provide supporting
9.       10.	data in Remarks or on a separate sheet)  Wetland Non-Vascular Plants <sup>1</sup>
11.	
	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: _) 1	Hydrophytic Vegetation Yes X No
2	Present?
	= Total Cover
% Bare Ground in Herb Stratum: 10 % Cove Remarks:	r Biotic Crust: 0

**SOIL** Sampling Point:

Depth	Matrix	0/	Oales (see 1.1)		Redox Features		Tendure
(inches) 0-3 3-18+	Color (moist) 10YR 4/2 10YR4/3	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture Remarks Silm Silm
0 101	1011040						
ype: C=Con	centration, D=Deple	etion, RM=	Reduced Matrix, CS	S=Covered o	or Coated Sand	d Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Histosol Histic Ep Black Hi Hydroge Stratifie 1 cm Mu Depleted Thick Da Sandy M Sandy G		: C)	Strippe Loamy Loamy Deplet Redox Deplet Redox	Redox (S5) ed Matrix (S	6) eral (F1) ( <b>exce</b> ttrix (F2) F3) ce (F6) rface (F7)	ept MLRA 1)	Indicators for Problematic Hydric S  1 cm Muck (A9)(L,RR C)  2 cm Muck (A10)(LRR C)  Reduced Vertic (F18)  Red Parent Material (TF2)  Other (Explain in Remarks)  3Indicators of hydrophytic vegetation a wetland hydrology must be present, undisturbed or problematic.
mo:							<b>-</b>
epth (inches):	:heavily grazed					Hydri Prese	c Soil Yes nt? NoX
epth (inches): emarks: Site	heavily grazed					•	40 V
epth (inches): emarks: Site	heavily grazed  GY ology Indicators:	e required	; check all that appl	· · · · · · · · · · · · · · · · · · ·		•	40 V
epth (inches): emarks: Site    IYDROLOG /etland Hydro rimary Indicat Surface W High Wate	heavily grazed  GY  ology Indicators: tors (minimum of on /ater (A1) er Table (A2)	e required	Salt Crust Biotic Cru	(B11) st (B12)	(B13)	•	Secondary Indicators (2 or more required Water Marks (B1)(Riverine) Sediment Deposits (B2)(Riverine)
epth (inches):  emarks: Site    IYDROLOG  Vetland Hydrorimary Indicate Surface W High Wate Saturation  X Water Mar  X Sediment Drift Depo	heavily grazed  GY  ology Indicators: tors (minimum of on /ater (A1) er Table (A2)	e) iverine)	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized F	(B11) vertebrates Sulfide Odo Rhizosphere of Reduced	or (C1) es along Living	Prese	Secondary Indicators (2 or more required Water Marks (B1)(Riverine) Sediment Deposits (B2)(Riverine) Drift Deposits (B3)(Riverine)) Drainage Patterns (B10) Dry Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8)
IYDROLOG Vetland Hydrorimary Indicat Surface W High Wate Saturation X Water Mar X Sediment Drift Depo	heavily grazed  GY  ology Indicators: tors (minimum of on /ater (A1) er Table (A2) n (A3) rks (B1)(Nonriverine Deposits (B2)(Nonriverine	e) iverine) e)	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized F Presence Recent Iro	(B11) vertebrates Sulfide Odc Rhizosphere of Reduced n Reduction	or (C1) es along Living Iron (C4) n in Tilled Soils	Prese	Secondary Indicators (2 or more required  Water Marks (B1)(Riverine)  Sediment Deposits (B2)(Riverine)  Drift Deposits (B3)(Riverine))  Drainage Patterns (B10)  Dry Season Water Table (C2)  Thin Muck Surface (C7)
epth (inches): emarks: Site    IYDROLOG  Vetland Hydrorimary Indicat Surface W High Wate Saturation Water Mar Orift Depo Surface So Inundation Water-Sta	heavily grazed  GY  ology Indicators: tors (minimum of on /ater (A1) or Table (A2) n (A3) rks (B1)(Nonriverine Deposits (B2)(Nonriverin oil Cracks (B6) n Visible on Aerial In ined Leaves (B9)  ations:	e) iverine) e) nagery (B7	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized F Presence Recent Iro  X Other (Exp	(B11) vertebrates Sulfide Odc Rhizosphere of Reduced in Reduction	or (C1) es along Living Iron (C4) n in Tilled Soils	Prese	Secondary Indicators (2 or more required  Water Marks (B1)(Riverine)  Sediment Deposits (B2)(Riverine)  Drift Deposits (B3)(Riverine))  Drainage Patterns (B10)  Dry Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation visible on Aerial Image (C9)  Shallow Aquatard (D3)
epth (inches): emarks: Site    IYDROLOG  /etland Hydrorimary Indicat	heavily grazed  GY  ology Indicators: tors (minimum of on /ater (A1) er Table (A2) n (A3) rks (B1)(Nonriverine peposits (B2)(Nonriverin oil Cracks (B6) n Visible on Aerial In nined Leaves (B9)  ations: r Present? Y	e) iverine) e) nagery (B7 es es	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized F Presence Recent Iro  X Other (Exp	(B11) vertebrates Sulfide Odo Rhizosphere of Reduced in Reduction plain in Rem (inches): (inches):	or (C1) es along Living Iron (C4) n in Tilled Soils narks)	Roots (C3) (C6)  Wetland Hydrolog y	Secondary Indicators (2 or more required  Water Marks (B1)(Riverine)  Sediment Deposits (B2)(Riverine)  Drift Deposits (B3)(Riverine))  Drainage Patterns (B10)  Dry Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation visible on Aerial Image (C9)  Shallow Aquatard (D3)
epth (inches): emarks: Site    IYDROLOG  Vetland Hydrorimary Indicate Surface W High Water Saturation Water Mar  C Sediment Drift Depo Surface So Inundation Water-Sta  Field Observation Water Table F  Saturation President Capiller  Saturation Presi	heavily grazed  GY  ology Indicators: tors (minimum of on /ater (A1) er Table (A2) n (A3) rks (B1)(Nonriverine Deposits (B2)(Nonriverin oil Cracks (B6) n Visible on Aerial In ined Leaves (B9)  ations: r Present? Present? Y esent? Illary fringe)	e) iverine) e) nagery (B7 es es es	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized F Presence Recent Iro  X Other (Exp  No X Depth No X Depth	(B11) vertebrates Sulfide Odc Rhizosphere of Reduced in Reduction Dlain in Rem (inches): (inches): (inches):	or (C1) es along Living Iron (C4) n in Tilled Soils narks)	Roots (C3) (C6)  Wetland Hydrolog y Present?	Secondary Indicators (2 or more required  Water Marks (B1)(Riverine)  Sediment Deposits (B2)(Riverine)  Drift Deposits (B3)(Riverine))  Drainage Patterns (B10)  Dry Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation visible on Aerial Image (C9)  Shallow Aquatard (D3)  X FAC-Neutral Test (D5)

## WETLAND DETERMINATION DATA FORM – Arid West Region

Idaho Transportation		· <u> </u>		Counties		10/01/2010
Applicant/Owner: Dept./COMPASS				Sampling Point:		
Investigator(s): C. MacLaren  Valley	\$	Section, Towns	ship, Range:	Sec. 22, T4N, R1W		
Landform (hillslope, terrace, etc.): Bottom Snake River				none): Flat		
Subregion (LRR): Basin (LRR B)	L	at: <u>43.664</u>	Lo	ong: <u>-116.451</u>	Datum:	
Soil Map Unit Name:			_ NWI classific	ation: <u>upland</u>		
Are climatic / hydrologic conditions on the site typical for this	s time of y	ear? Yes	No	(If no, ex	plain in Remarks	s.)
Are Vegetation x Soil or Hydrology	sig	nificantly distu	rbed? Are "N	Iormal Circumstances	s" present? Ye	es No
Are Vegetation Soil or Hydrology	nati	urally problema	atic? (If nee	ded, explain any ansv	wers in Remarks.	2)
SUMMARY OF FINDINGS – Attach site map	showing	g sampling	point locat	ions, transects,	important fe	atures, etc.
Hydrophytic Vegetation Present?         Yes         No           Hydric Soil Present?         Yes         X         No           Wetland Hydrology Present?         Yes         X         No			Sampled Area a Wetland?	Yes	No X	-
VEGETATION – Use scientific names of plan	ts.					1
A Tree Stratum (Plot size:_) 1. 2. 3. 4.	Cover	Dominant Species?	Indicator Status	Dominance Test w Number of Dominan that are OBL, FACV Total Number of Do	nt Species V, or FAC:	(A)
		=Total Cover		Species Across All	Strata:	1 (B)
Sapling/Shrub Stratum (Plot size: ) 1				Percent of Dominar that are OBL, FAC		(A/B)
2				Prevalence Index Total % Cover of: OBL species		Multiply by:
					x 2 =	·
Herb Stratum (Plot size: 15' diam.)		= Total Cover		FAC species FACU species UPL species	60 x 3 = x 4 = x 5 =	<u> </u>
Agricultural Crops- corn	100			Column Totals:	60(A)	180(B)
2				Prevalence Ir	ndex = B/A =	3.00
4.				Hydrophytic Vege	tation Indicators	S:
6.				Prevalence I  Morpholog data in Re Wetland N	gical Adaptations emarks or on a se Non-Vascular Pla	ints <sup>1</sup>
11		= Total Cover			soil and wetland	'egetation <sup>1</sup> (Explain) d hydrology must be natic.
Woody Vine Stratum (Plot size: _)  1				Hydrophytic Vegetation Present?	Yes	NoX
		= Total Cover				
% Bare Ground in Herb Stratum: 40 % Remarks:	Cover Bio	otic Crust:	0			

SOIL Sampling Point: SP-08

Profile Descrip	otion: (Describe t	o the dept	h needed to docun	nent the inc	dicator or con	firm the abser	nce of indicate	ors.)
Depth	Matrix			R	tedox Features			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	– Remarks
0-20+	10YR 4/3	100	7.5YR 4/4, 4/6	2%	C		Silm	Soils loose, friable
	-							
								_
	-							-
¹Type: C=Cond	centration. D=Depl	etion. RM=	Reduced Matrix, CS	=Covered o	or Coated Sand	d Grains.	Location: PL=	Pore Lining, M=Matrix.
	•		LRRs, unless other					s for Problematic Hydric Soils <sup>3</sup> :
Histosol		ibic to all i		Redox (S5)				cm Muck (A9)(L,RR C)
	ipedon (A2)			d Matrix (S				cm Muck (A10)(LRR C)
Black His					eral (F1) ( <b>exce</b>	ept MLRA 1)	·	educed Vertic (F18)
	n Sulfide (A4)			Gleyed Ma	. , .	,		ed Parent Material (TF2)
	d Layers (A5)(LRI	R C)		ed Matrix (F	` '			her (Explain in Remarks)
1 cm Mu	ick (A9)(LRR D)		Redox	Dark Surfac	ce (F6)			
Depleted	l Below Dark Surfa	ce (A11)	Deplete	ed Dark Sur	face (F7)		31	
Thick Da	rk Surface (A12)			Depression	s (F8)			s of hydrophytic vegetation and ydrology must be present, unless
Sandy M	lucky Mineral (S1)		Vernal	Pools (F9)				or problematic.
	leyed Matrix (S4)							
-	er (if present):							
Type:						Hydric Preser	.40	<u> </u>
Depth (inches):	-					1 10001	It? No	
Remarks: Sligh	tlv hummockv. We	ak indicatio	ons that soils forming	under hvd	ric conditions.			
			nay be flooded by in			ıg US 20/26.		
HYDROLOG	2V							
	ology Indicators: ors (minimum of or	ne reauired	; check all that apply	<b>/</b> )			Secondary I	ndicators (2 or more required)
Surface W			Salt Crust	-				Marks (B1)(Riverine)
	r Table (A2)		Biotic Cru					ent Deposits (B2)(Riverine)
Saturation				vertebrates	(B13)			eposits (B3)(Riverine))
<del></del>	ks (B1)(Nonriverin	e)	<del></del> '	Sulfide Odd	, ,			ge Patterns (B10)
	Deposits (B2)(Noni	•			s along Living	Roots (C3)	· · · · · · · · · · · · · · · · · · ·	ason Water Table (C2)
	sits (B3)(Nonriverir	,		of Reduced		110010 (00)		uck Surface (C7)
	oil Cracks (B6)	,			n in Tilled Soils	(C6)		h Burrows (C8)
	G. G. G. G. (20)					(00)		tion visible on Aerial Imagery
Inundation	Visible on Aerial II	magery (B7	') X Other (Exp	olain in Rem	narks)		(C9)	
Water-Stai	ned Leaves (B9)						Shallov	v Aquatard (D3)
							FAC-N	eutral Test (D5)
						1		
Field Observa								
Surface Water	Present? Ye	s	No X Depth	(inches):		ļ		
Water Table P	resent? Ye	s	No X Depth	(inches): _		Wetland Hydrology	Yes X	No
Saturation Pre	sent? Ye	s	No X Depth	(inches):		Present?		
(includes capil	lary fringe)			_				
Describe Reco	orded Data (stream	gauge, mo	onitoring well, aerial	photos, pre	vious inspectio	ns), if available	e:	
	<b>(</b> ====================================	3 3 7	<b>J</b> ,	. ,,,	<i>p</i>	,.		
Remarks: Are	a slightly more hur	nmocky tha	an nearby pasture.					
Ма	rginal wetland call.	Water so	urce appears to be f	rom irrigatio	on leakage fron	n unlined ditch	to south.	

## WETLAND DETERMINATION DATA FORM – Arid West Region

Idaho Transportation			Counties  Sampling Point:		10/01/2010
	<del></del>		<del></del>		
Investigator(s): C. MacLaren  Valley	_ Section, Town	snip, Range: _	Sec. 21, T4N, R1W		<del></del>
Landform (hillslope, terrace, etc.): Bottom Snake River	<del></del> "		none): Flat	<u></u>	
Subregion (LRR): Basin (LRR B)					
Soil Map Unit Name:		NWI classific	cation:		
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes	X No	(If no, ex	plain in Remark	(S.)
Are Vegetation X Soil or Hydrology	significantly distu	urbed? Are "N	Normal Circumstances	s" present? Y	'es <u>X</u> No
Are Vegetation Soil or Hydrology	naturally problem	natic? (If nee	eded, explain any ans	wers in Remark	s.)
SUMMARY OF FINDINGS - Attach site map show	ing samplinر،	g point locat	ions, transects,	important f	eatures, etc.
Hydrophytic Vegetation Present? Yes X No	- lo the	Sampled Area			
Hydric Soil Present? Yes No _X	_ within	a Wetland?	Yes	No X	_
Wetland Hydrology Present? Yes No _X	_				
VEGETATION – Use scientific names of plants.					, i
Absolute Tree Stratum (Plot size: ) Cove		Indicator Status	Dominance Test w	orkshoot:	
1	Орсска	Clatas	Number of Domina		
2.			that are OBL, FAC		2 (A)
3			Total Number of Do	minant	
4			Species Across All		2 (B)
	=Total Cover				(D)
			Percent of Dominar		
Sapling/Shrub Stratum (Plot size: )			that are OBL, FAC\	N, or FAC:	100 (A/B)
1					
3.			Prevalence Index	worksheet:	
4.			Total % Cover of:		Multiply by:
5			OBL species		=
	- Total Caven		FACW species	x 2	
	= Total Cover		FAC species FACU species	x 3	= 210
					-
Herb Stratum (Plot size: 15' diam_)			UPL species	x 5	=
1. Plantago lanceolata 30	Y	FAC		x 5	=(B)
1. Plantago lanceolata       30         2. Festuca arundinacea       40	Y Y N	FAC	UPL species Column Totals:	x 5 (A	= (B)(B)
1. Plantago lanceolata 30	Y Y N N		UPL species	x 5 (A	=(B)
1. Plantago lanceolata       30         2. Festuca arundinacea       40         3. Taraxacum officinale       Tr         4. Cirsium undulatum       Tr	N N	FAC FACU	UPL species Column Totals:	70 ndex = B/A =	=(B)(B)(B)(B)
1. Plantago lanceolata       30         2. Festuca arundinacea       40         3. Taraxacum officinale       Tr         4. Cirsium undulatum       Tr         5.       ————————————————————————————————————	N N	FAC FACU UPL	UPL species Column Totals:  Prevalence In  Hydrophytic Vege	70 ndex = B/A =	210 3.0 (B)
1. Plantago lanceolata       30         2. Festuca arundinacea       40         3. Taraxacum officinale       Tr         4. Cirsium undulatum       Tr         5.       —         6.       —         7.       —	N N	FACU UPL	UPL species Column Totals:  Prevalence In  Hydrophytic Vege  Y  Dominance Y  Prevalence	$\begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} $	=(B)(B)(B)
1. Plantago lanceolata       30         2. Festuca arundinacea       40         3. Taraxacum officinale       Tr         4. Cirsium undulatum       Tr         5.       —         6.       —         7.       —         8.       —	N N	FACU UPL	UPL species Column Totals:  Prevalence Ir  Hydrophytic Vege  Y Dominance Y Prevalence Morphological	x 5 (A 70 $x 6 = B/A = 0$ $x 6 = 0$ $x 6 = 0$ $x 7 =$	=(B)(B)(B)
1. Plantago lanceolata       30         2. Festuca arundinacea       40         3. Taraxacum officinale       Tr         4. Cirsium undulatum       Tr         5.       —         6.       —         7.       —         8.       —         9.       —	N N	FACU UPL	UPL species Column Totals:  Prevalence Ir  Hydrophytic Vege  Y Dominance Y Prevalence Morphologidata in Re	x 5 (A 70 ndex = B/A =  tation Indicato be Test is >50% be Index is ≤3.0° gical Adaptation emarks or on a second content of the content of th	(B) 210 3.0  rs:  on s <sup>1</sup> (Provide supporting separate sheet)
1. Plantago lanceolata       30         2. Festuca arundinacea       40         3. Taraxacum officinale       Tr         4. Cirsium undulatum       Tr         5.       —         6.       —         7.       —         8.       —         9.       —         10.       —	N N	FACU UPL	UPL species Column Totals:  Prevalence Ir  Hydrophytic Vege  Y Dominance Y Prevalence Morpholoe data in Re Wetland N	x 5 (A 70 ndex = B/A =  tation Indicato ce Test is >50% ce Index is ≤3.0 gical Adaptation emarks or on a s Non-Vascular Pl	210 3.0 (B) 210 3.0 (rs:
1. Plantago lanceolata       30         2. Festuca arundinacea       40         3. Taraxacum officinale       Tr         4. Cirsium undulatum       Tr         5.       —         6.       —         7.       —         8.       —         9.       —	N N	FACU UPL	UPL species Column Totals:  Prevalence Ir  Hydrophytic Vege  Y Dominance Y Prevalence Morphologidata in Reference Ir  Wetland N Problema	x 5 (A 70 ndex = B/A =  tation Indicato ce Test is >50% ce Index is <3.0 gical Adaptation cemarks or on a s Non-Vascular PI tic Hydrophytic	(B) 210 3.0  rs:  on s <sup>1</sup> (Provide supporting separate sheet)
1. Plantago lanceolata       30         2. Festuca arundinacea       40         3. Taraxacum officinale       Tr         4. Cirsium undulatum       Tr         5.       —         6.       —         7.       —         8.       —         9.       —         10.       —	N N	FACU UPL	UPL species Column Totals:  Prevalence Ir  Hydrophytic Vege  Y Dominance Y Prevalence Morphologidata in Reference Ir  Wetland N Problema	x 5 (A 70 ndex = B/A =  tation Indicato ce Test is >50% ce Index is ≤3.0¹ gical Adaptation emarks or on a s Non-Vascular PI tic Hydrophytic c soil and wetlar	210 3.0  (B) ars:  (rs:  (Provide supporting separate sheet) lants  Vegetation¹ (Explain) and hydrology must be
1. Plantago lanceolata       30         2. Festuca arundinacea       40         3. Taraxacum officinale       Tr         4. Cirsium undulatum       Tr         5.       —         6.       —         7.       —         8.       —         9.       —         10.       —         11.       —	N N	FACU UPL	UPL species Column Totals:  Prevalence Ir  Hydrophytic Vege  Y Dominance Y Prevalence Morphologicata in Reference Wetland New Problema  Indicators of hydric present, unless dist	x 5 (A 70 ndex = B/A =  tation Indicato ce Test is >50% ce Index is ≤3.0¹ gical Adaptation emarks or on a s Non-Vascular PI tic Hydrophytic c soil and wetlar	210 3.0  (B) ars:  (rs:  (Provide supporting separate sheet) lants  Vegetation¹ (Explain) and hydrology must be
1. Plantago lanceolata       30         2. Festuca arundinacea       40         3. Taraxacum officinale       Tr         4. Cirsium undulatum       Tr         5.       —         6.       —         7.       —         8.       —         9.       —         10.       —         11.       —	N N	FACUUPL	UPL species Column Totals:  Prevalence Ir  Hydrophytic Vege  Y Dominance Y Prevalence Morpholoo data in Recommon Wetland New Problema  Indicators of hydric	x 5 (A 70 ndex = B/A =  tation Indicato ce Test is >50% ce Index is ≤3.0¹ gical Adaptation emarks or on a s Non-Vascular PI tic Hydrophytic c soil and wetlar turbed or proble	210 3.0  (B) ars:  (rs:  (Provide supporting separate sheet) lants  Vegetation¹ (Explain) and hydrology must be
1. Plantago lanceolata       30         2. Festuca arundinacea       40         3. Taraxacum officinale       Tr         4. Cirsium undulatum       Tr         5.       —         6.       —         7.       —         8.       —         9.       —         10.       —         11.       —          Woody Vine Stratum (Plot size: _)	N N	FAC FACU UPL	UPL species Column Totals:  Prevalence Ir  Hydrophytic Vege  Y Dominance Y Prevalence Morphologidata in Reference Wetland New Problema  Indicators of hydric present, unless dist	x 5 (A 70 ndex = B/A =  tation Indicato ce Test is >50% ce Index is ≤3.0¹ gical Adaptation emarks or on a s Non-Vascular PI tic Hydrophytic c soil and wetlar turbed or proble	210 3.0  (B) 210 3.0  ors:  ors:  ors' (Provide supporting separate sheet) lants¹  Vegetation¹ (Explain) ond hydrology must be smatic.
1. Plantago lanceolata       30         2. Festuca arundinacea       40         3. Taraxacum officinale       Tr         4. Cirsium undulatum       Tr         5.       —         6.       —         7.       —         8.       —         9.       —         10.       —         11.       —          Woody Vine Stratum (Plot size: _)         1.       —	N N	FACUUPL	UPL species Column Totals:  Prevalence Ir  Hydrophytic Vege  Y Dominance Y Prevalence Morphologedata in Reference Wetland New Problema  Indicators of hydric present, unless distince Vegetation	x 5 (A 70 ndex = B/A =  tation Indicato ce Test is >50% ce Index is ≤3.0¹ gical Adaptation emarks or on a s Non-Vascular PI tic Hydrophytic c soil and wetlar turbed or proble	210 3.0  (B) 210 3.0  ors:  ors:  ors' (Provide supporting separate sheet) lants¹  Vegetation¹ (Explain) ond hydrology must be smatic.
1. Plantago lanceolata       30         2. Festuca arundinacea       40         3. Taraxacum officinale       Tr         4. Cirsium undulatum       Tr         5.       —         6.       —         7.       —         8.       —         9.       —         10.       —         11.       —         Woody Vine Stratum (Plot size: )       —         1.       —         2.       —	= Total Cover	FACUUPL	UPL species Column Totals:  Prevalence Ir  Hydrophytic Vege  Y Dominance Y Prevalence Morphologedata in Reference Wetland New Problema  Indicators of hydric present, unless distince Vegetation	x 5 (A 70 ndex = B/A =  tation Indicato ce Test is >50% ce Index is ≤3.0¹ gical Adaptation emarks or on a s Non-Vascular PI tic Hydrophytic c soil and wetlar turbed or proble	210 3.0  (B) 210 3.0  ors:  ors:  ors' (Provide supporting separate sheet) lants¹  Vegetation¹ (Explain) ond hydrology must be smatic.
1. Plantago lanceolata       30         2. Festuca arundinacea       40         3. Taraxacum officinale       Tr         4. Cirsium undulatum       Tr         5.       —         6.       —         7.       —         8.       —         9.       —         10.       —         11.       —         Woody Vine Stratum (Plot size: )       —         1.       —         2.       —	N N	FACUUPL	UPL species Column Totals:  Prevalence Ir  Hydrophytic Vege  Y Dominance Y Prevalence Morphologedata in Reference Wetland New Problema  Indicators of hydric present, unless distince Vegetation	x 5 (A 70 ndex = B/A =  tation Indicato ce Test is >50% ce Index is ≤3.0¹ gical Adaptation emarks or on a s Non-Vascular PI tic Hydrophytic c soil and wetlar turbed or proble	210 3.0  (B) 210 3.0  ors:  ors:  ors' (Provide supporting separate sheet) lants¹  Vegetation¹ (Explain) ond hydrology must be smatic.

SOIL Sampling Point: SP-09

Profile Descri	ption: (Describe t	o the depth	needed to docur	ment the ind	icator or con	firm the abse	nce of indicators	.)
Depth	Matrix			Re	edox Features	<b>i</b>		
(inches) <b>0-18+</b>	Color (moist) 10YR 4/3	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture Si Im	Remarks
	_							
	_							
<sup>1</sup> Type: C=Con	centration, D=Depl	etion, RM=F	Reduced Matrix, CS	S=Covered o	r Coated Sand	d Grains.	<sup>2</sup> Location: PL=Pc	re Lining, M=Matrix.
Hydric Soil Inc	dicators: (Applica	ble to all L	RRs, unless othe	rwise noted.	)		Indicators fo	or Problematic Hydric Soils <sup>3</sup> :
Histosol				Redox (S5)			1 cm	Muck (A9)(L,RR C)
	pipedon (A2)			ed Matrix (S6				Muck (A10)(LRR C)
	istic (A3)			-	eral (F1) (exce	ept MLRA 1)		iced Vertic (F18)
	en Sulfide (A4) ed Layers (A5)(LRI	3 C)		Gleyed Mat				Parent Material (TF2)
	uck (A9)(LRR D)	( 0)		ted Matrix (F3 Dark Surfac			Othe	r (Explain in Remarks)
	d Below Dark Surfa	ce (A11)		ed Dark Surf	` '		2	
	ark Surface (A12)	,		Depressions	, ,		Indicators of wetland hydr	f hydrophytic vegetation and ology must be present, unless
Sandy N	Mucky Mineral (S1)		Vernal	Pools (F9)	,		disturbed or	
Sandy C	Gleyed Matrix (S4)		<u> </u>					
	yer (if present):							
Type:						Hydri Prese		<u>x</u>
Depth (inches)	•						···· NO	
	ntly less hummocky above 3", slightly m							
	ology Indicators: tors (minimum of or	ne required;	check all that appl	y)			Secondary Indi	cators (2 or more required)
Surface W	/ater (A1)		Salt Crust	(B11)			Water Ma	rks (B1)(Riverine)
High Wate	er Table (A2)		Biotic Cr	ust (B12)			Sediment	Deposits (B2)(Riverine)
Saturation	ı (A3)		Aquatic In	vertebrates (	B13)			sits (B3)(Riverine))
	rks (B1)(Nonriverin	,		Sulfide Odor	. ,			Patterns (B10)
	Deposits (B2)(Non			•	s along Living	Roots (C3)		on Water Table (C2)
	sits (B3)(Nonriverir	ne)		of Reduced	, ,			Surface (C7)
	oil Cracks (B6) n Visible on Aerial II	magery (B7)		on Reduction plain in Rema	in Tilled Soils arks)	(C6)		Burrows (C8) n visible on Aerial Imagery
Water-Sta	ined Leaves (B9)			•	,			quatard (D3)
								tral Test (D5)
						1		
Field Observ								
Surface Wate			No X Depth			Wetland		
Water Table F			No X Depth			Hydrology	Yes	No <u>X</u>
Saturation Pre (includes capi		es	No X Depth	(inches):		Present?		
Describe Rec	orded Data (stream	gauge, mo	nitoring well, aerial	photos, prev	vious inspectio	ons), if availab	le:	
Domarks: Li-	land Day flat again	uro						
Remarks: Up	land. Dry, flat past	uie						

U.S. Highway 20/26 corridor Preservation Study, Wetlands and Waters of the U.S. Report Idaho Transportation Department
APPENDIX C-Functional Assessment Data Sheets

Montana DEQ - Wetland Rapid Assessment Form (Version 2.0)

	001.2	Assessment Number O
Site Name	U.S. 20-26	Date May 11, 2007
Land Ownership	VARIOUS	Person(s) Assessing Wetland & Affiliations
HUC 4th/5th Code		· · · · · · · · · · · · · · · · · · ·
HUC 4th/5th Name		COLIN MacLAREN  Tina Farrelly  Parametrix, Inc.
Elevation (ft)		Tina Facrelly
Location Informati	on	
UTME		
UTMN		
Datum	NAD27 UTM Zone 11	
	NAD83 12	
00010	Other: 13	•
GPS ID	J. Marian	
GPS error (incl		
Beneral Site De	SCRIPTION (Location , Wildlife Observations, Beaver Activity,	Outstanding Features, Vegetative Types, observed impacts, etc.):
<u>U.S.</u>	20-26 crossings of Pifte	enmile Creek and Mason Creek.
	streams are aftered via st	caightening / Channelling, Vegetation
<u> </u>	ing, and possibly dichaine.	Both have limited connectivity to
adjac	cent floodplains within the	tudy area.
···		

Photo#	Direction Facing	Description of what is in the photo	
			, , , , , , , , , , , , , , , , , , ,

# 1.0 Wetland Classification

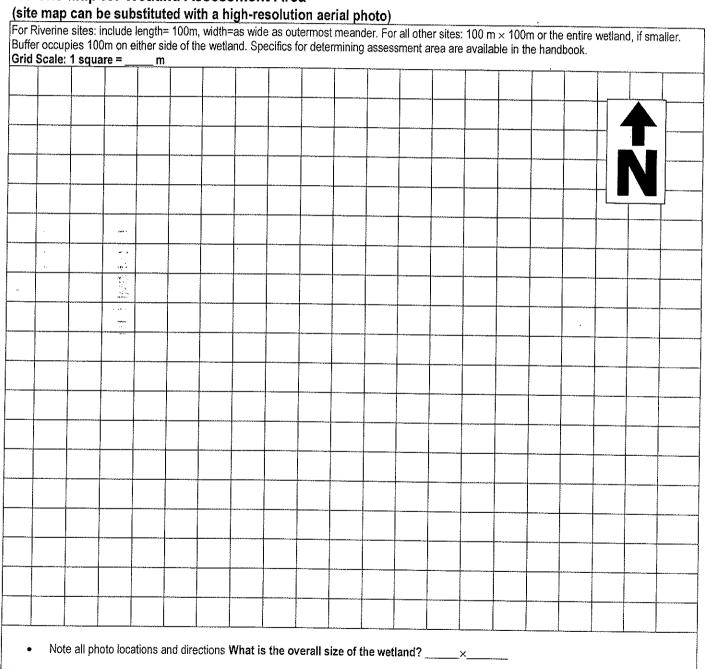
1.1 Wetland is being assessed to reflect (Circle)	1.2 HGM Classifi	cation (Circle one Class o	or Subclass)		gargagian jalah
Natural Wetland Type (assess potential)	Riverine	Depressional	Lacustrine Fringe	Slope	Mineral Soil Flats
Altered Wetland Type (assess capability)	Upper Perennial	Closed		Open Spring	Playa Lakes
Completely Altered (no longer functioning as a wetland,	Lower Perennial	Open groundwater		Riverine Spring	
and it is not feasible to survey wetland condition)	Non-Perennial,	Open surface water		Fen	
*What alterations have been made?	Intermittent or Ephemeral			Wet Meadow	
· · · · · · · · · · · · · · · · · · ·					

I S COWARDIT	Wetland Classific	ation (ivote: Wetiai	ias sites cai	n nave mor	e than on	e system)	
	em, Subsystem, Class,	Water Regime, Modifi				of all categories present	
System	Subsystem	Class	Water Regimes	Modifiers	Percent	Determine the wetland area by locating the boundary	Types of Water Regimes and Modifiers
Riverine	Rocky Bottom	•		1	where wetland dependent	Water Regimes - Choose the regime that	
(Stream)	1	Unconsolidated Bottom )	2		100	vegetation meets vegetation	is most common in the area.
	Lower Perennial	Aquatic Bed	,		1	and features not	A Temporarily Flooded
	(Larger Tributary)	Emergent Wetland			1	characteristic of wetlands	B Saturated
	The second secon	Rocky Shore				(See guidebook for more	C Seasonally Flooded
	Unconsolidated Shore			1	information)	D Seasonally Flooded/Well Drained	
	Rocky Boltom			1	,	E Seasonally Flooded/Saturated	
	Linner Berenniel	Unconsolidated Bottom				Do not include limnetic	F Semipermanently Flooded
	Upper Perennial	Aquatic Bed				subsystems which are deep	U Unknown
	(Smaller Tributary)	Rocky Shore				water habitats that are	C Criticians
		Unconsolidated Shore			1	greater than 2 meters (6,6	Modifiers
	Intermittent	Stream Bed				feet) or the maximum extent	g excavated
Lacustrine	Limnetic	Rocky Bottom			1	of nonpersistent emergents. If these grow at depths greater than 2 m.	h impounded
(Lake)	(Deepwater habitat)	Unconsolidated Bottom					i diked
• •		Aquatic Bed					j partly drained
		Rocky Bottom				<b>3</b> =	k farmed
	Littoral	Unconsolidated Bottom					l artificial dam
	(Between Shore and	Aquatic Bed					m beaver dam
	Deepwater Habitat)	Emergent Wetland					o diverted
	реерматег партат	Rocky Shore					p rip rap
		Unconsolidated Shore					P 1.5 1.45
Palustrine		Rocky Bottom					Aquatic Bed = plants growing in water
(Pond or riparial	n)	Unconsolidated Bottom					Rocky Bottom/ Shore = cobble or rock
		Aquatic Bed					along Shore
		Emergent Wetland					Unconsolidated Bottom/ Shore = muddy
		Rocky Shore		***************************************			Emergent = grasses, sedges, rushes, etc.
		Unconsolidated Shore					Scrub-Shrub = Bushes, Vegetation less
		Moss-Lichen Wetland					than 20ft tall
		Scrub-Shrub Wetland		-/-1			Forested = woody vegetation that is 6 m
		Forested Welland					tall or taller

2.1 Are Fish Present?		Not Sure	> Species	(if known)?		
2.2 Amphibian and Aqua	tic Reptile Species	Observed - check and	describe life star	ge below: Ea	as, tadpole, adult	
Common Name	ife Stage	Common Name	Life Stage		Common Name	Life Stage
Boreal Chorus Frog		Snapping Turtle			Long-toed Salamander	
uilfrog		Spiny Softshell			Northern Leopard Frog	
oeur D'Alene Salamander		Tiger Salamander			Pacific Treefrog	***************************************
olumbia Spotted Frog		Western Hognose Snake			Painted Turtle	
ommon Gartersnake		Terrestrial Gartersnake			Plains Garter Snake	
reat Plains Toad		Western Toad			Plains Spadefoot	
Vestern Skink		Woodhouse's Toad			Rocky Mtn Tailed Frog	
mooth Greensnake		Other (describe if unknow	n):			
.3 Estimate the Percent		adan kanan 1966 dan menangkan pelah sebia Penggan penggan	property and			
ercentage of standing water boo		0	(1-25)	26-50	51-75	76-100
ercentage of standing water boo	ly 50-200 cm depth	Û	1-25	26-50	51-75	(76-100")
ercentage of standing water boo	ly >200 cm depth	0	1-25	26-50	51-75	76-100
2.4 Threatened or Endar	agered Species Ob	served - check if prese	nt and describe	in the snace	provided below	cia cia porta de la compagna de la c
heck Species	Region Found		Kalendar salah dari	are epace	provided actions	Status
Least Tem	Near Fort Peck Dam &	Miles City	<u></u>		<u> </u>	Endangered
Whooping Crane	Northeastern Montana					Endangered
Bald Eagle	Entire region					Threatened
Piping Plover	North-central and East	em portions of the state				Threatened
Black-Footed Ferret	Northeastern Montana					Endangered
Canada Lynx	Entire region					Threatened
Gray Wolf	Entire region			***************************************		Threatened/Endangered
Grizzly Bear	Greater Yellowstone, N	lorthern Continental Divide, C	abinet-Yaak, Bitterro	ot Selway Ecos	ystems	Threatened
	Entire Region				4,	Threatened
Bull Trout		e River below Powder River i	mouth			Endangered
Bull Trout Pallid Sturgeon						
Bull Trout Pallid Sturgeon White Sturgeon	Kootenai River					Endangered
Bull Trout Pallid Sturgeon						Threatened

2.5 Check am	t of surface	area of any	emergent ve	getation			·····	<b>A</b>	
Type Sedges	1-25%	25-50%	50-75%	76-100%			Grasses	<b>↑</b> ↑	Trees
Cattails					END		Sedges	←()	Photo
Grasses Rushes	3				LEGI			ZMZ	Shrubs
Waterlilies Shrubs					-		Rushes Fence		Assessment
Trees							1 CIICC		Boundary
Other		L			Please	describe:			

# 2.6 Site Map for Wetland Assessment Area



3.0 Hydrogeomorphology Condition

Degree of hydrologic disturbance (All Wetland Types)	Non Occurrin	g/Slight	Mode	erate		Severe
3.1 Degree of wetland surface or subsurface flow patterns that has been "negatively" altered by human disturbance (e.g., roads, buildings, rip rap, levees, bridges approaches, weirs, dams, etc.) *Consider how structures accommodate safe passage of flows (e.g., lower the rating if headcuts are affecting dam or spillway)	. 10		4			0
3.2 Degree of wetland habitat negatively altered by addition or withdrawal for irrigation, livestock watering, drainage, etc     *Consider impacts from any abnormal fluctuating water levels.	10		4		,	0
3.3 Amount of wetland habitat negatively altered by dredging or filling	10		4			0
3.4 Percent of assessment area and the degree to which the wetland is disturbed by pugging or hummocking from animal hooves  Slight= Pugging is minimal or shallow/Hummocking has occurred/Vegetation and bank stability is intact or recovering Moderate= Pugging is minimal/Hummocks are deep/Wetland is beginning to dry out Severe= Hummocks are deep/ Pugging is common/Vegetation is dead or absent	<=25% None Occurring ( Slight Moderate Severe	10 9 6 5	26-7 Slight Moderate Severe	5% 7 4 2	Slight Moderate Severe	76-100% 5 3 1
Hydrogeomorphic Condition Index For hydrologic disturbance take the sum of the lowest 2  *For Riverine Sites use average of Riverine and Hydrogen	<u>Ø+</u>	<u> </u>		*Riverii	*0.54	0.27
Please provide comments for any impacts that scores <		5X65.				

Hydrogeomorphology - Riverine Wetland Addendum (Include only for Riverine Wetlands)

3.5 Riverine - Downcutting/Incisement: Note: The presence of active headcuts should nearly always keep the	Actual	Potential
stream reach from being rated sustainable.  Stable Channel		
	8	(8)
Evidence of downculting that is beginning to stabilize	6	6
Small headcuts; channel is in beginning staged of unraveling.	4	4
Unstable channel that is incised and actively widening; banks failure is common	2	2
Deeply incised resembling a gully	0	0
3.6 Riverine - Percent of Stream banks with active Lateral cutting:	Actual	Potential
Lateral bank erosion is in balance with the stream and its setting	8	8
There is a minimal amount of human-induced, active lateral bank erosion occurring, primarily limited to outside banks.	(5)	(5)
There is a moderate amount of human-induced active lateral bank erosion on either or both outside or inside banks	3	3
There is extensive human-induced lateral bank erosion occurring on outside and inside banks and straight sections.	0	0
3.7 Riverine - Stream in Balance with Water and Sediment Supply: Note: Rosgen B and naturally occurring D channels are exceptions.	Actual	Potential
vo evidence of excessive sediment removal or deposition, or that the stream is getting wider.	6	6
The stream has widened and/or become shallower due to unstable banks or from de-watering. New point bars are often forming with silt and common	4	4)
The stream tends to be very wide and shallow. Mid channel bars are often present. (See guidebook for prairies streams characteristics)	2	2
he stream has poor sediment transport. The channel is often braided with at least 3 active channels	0	0
3.8 Riverine - Floodplain Characterization: (Rosgen diagrams are available in the handbook)	Actual	Potential
ittle evidence of floodplain erosion	8	8
loodplain erosion not extensive	6	(6)
considerable evidence of floodplain erosion and occasional headcuts	4	4
rosion and headcuts within the floodplain are extensive. Some human-caused stream bank erosion is occurring	2	2
he floodplain is very limited or does not exist	(0)	0
3.9 Riverine - Streambank with Vegetation (Kind) having a Deep, Binding Rootmass: (see Appendix for stability ratings for most riparian, and other, species)	Actual	Potential
he streambank vegetative communities are comprised of at least four plant species with deep binding root masses	6	(6)
he streambank vegetative communities are comprised of at least three plant species with deep binding root masses	4	4
he streambank vegetative communities are comprised of at least two plant species with deep binding root masses	(2)	2
he streambank vegetative communities are comprised of one or no plant species with deep binding root masses	0	0
.10 Riverine - Streambank with Vegetation (Amount) having a Deep, Binding Rootmass: (see Appendix for tability ratings for most riparian, and other, species)	Actual	Potential
fore than 85% of the floodplain has vegetation with a stability rating greater than or equal to 6	6	(6)
5- 85% of the floodplain has vegetation with a stability rating greater than or equal to 6	4	4
5-75% of the floodplain has vegetation with a stability rating greater than or equal to 6	2	2
65% of the floodplain has vegetation with a stability rating greater than or equal to 6	(0)	
Please provide comment for any individual score <6:		Berkelf derece
If the potential is not at maximum, please explain:		
Riverine Index:  Sum the actual scores (3.5-3.10) and divide by the sum of the potential scores (usually the maximum scores):  Actual: ** + 5 + 4 + 0 + 2 + 0 =	<u> </u>	
Potential: 8 + 5 + 4 + 6 + 6 + 6 + 6 + 6 + 6 + 6 + 6 + 6	35	*0.54

4.0 Vegetation Condition \*Vegetation should only be assessed within the wetland assessment area

4.1 Bare Ground	None present/ Minimal <=5%	Some Present 6-15%	Common Occurrence 16-25%	Very apparent >25%
How much emergent vegetation is impacted by trampling or other human-caused disturbance?	10	8	4	0
*F(	or Noxious and Disturban	ce Caused Undesirable	e plants, look to the abundance	of harmful enocine

	d Distribance Caused O	ndesirable plants, look to the a	·	., .		
4.2 Invasive and Disturbance caused undesirable plants (Rank 3 most common and check all other observations)	None present	Some small patches are often present <=5%	Patches are large or commonly present 6-25%	Patches are large and extensive or Wetland is Dominated >25%		
	10	7	5			
4.3 Noxious Weeds (Rank 3 most common and check all other observations)	None present	Some small patches are often present <=5%	Patches are large or commonly present 6-25%	Patches are large and extensive or Wetland is Dominated >25%		
Tamarisk (Salt Cedar) Canada Thistle White Top Cress Spotted Knapweed Leafy Spurge Purple Loosestrife Yellowflag Iris Eurasian Milfoli	(10)	6	3	0		
Is woody vegetation present or trees or woody vegetation is not 4.4 Woody Species Establishment and R	present due to natural o	Skip the rest of this section i causes (not human impacts	f the site does not hav or removal).	e the pote	ntial for tall shrubs	
All age classes of desirable woody species present (se		10	(10)			
One age class of desirable woody species is clearly al		ed. Often, it will be the middle age gro	oup(s) absent.	6	6	
Two age classes (seedlings and saplings) of native sl mainly mature species. Other age classes well represe	rubs and/or two age classes o			-4	4	
Disturbance induced, (i.e., facultative, facultative uplar consist of decadent/dying individuals	nd species such as rose, or sno	wberry) or non-wetlands dominate. V	Voody species present	2	2	

4.4 Woody Species Establishment and Regeneration		- Landa de Landa		1 ( 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Actual	Potential
All age classes of desirable woody species present (see Guidebook).					10	(10)
One age class of desirable woody species is clearly absent, all others well repre	sented. Ofter	, it will be the mid	dle age group(s	) absent.	6	6
Two age classes (seedlings and saplings) of native shrubs and/or two age class mainly mature species. Other age classes well represented.	-4	4				
Disturbance induced. (i.e., facultative, facultative upland species such as rose, o consist of decadent/dying individuals	2	2				
A few woody species are present (<10% canopy cover), but herbaceous species ensure that it has potential for woody vegetation). OR, the site has at ≥ 5% cano	dominate (at	this point, the site ussian olive and/	e potential shoul or salt cedar.	d be re-evaluated to	(0)	0
4.5 Utilization of trees and shrubs:	ling Milder	Sesura a valua	a se a gaer liver	suku Horosyatélyatélosa	Actual	Potential
Few to none of the available second year and older stems are browsed					(10)	(10)
Second year and older stems lightly browsed					8	8
Second year and older stems are moderately browsed.		······································			6	6
Second year and older stems are heavily browsed. Many of the shrubs have eith	er a "clubbed	growth form, or	they are high-lir	ied or umbrella shaped.	2	2
There is noticeable use (10% or more) of unpalatable and normally unused wood	ly species				0	0
4.6 Percent of physical removal of tree/shrub layer or	<=5%	6-25%	26-50%	51-75%	18 48 48	76-100%
dead wood caused by concentrated livestock trampling and rubbling, drying out of site due to stream incisement, human-caused wetland drainage or flooding, etc.	10	8	5	2	0	
Please provide comments for any individual scores less than 6:	5,65465,65,465	Sign of				192010 (S.) 6145 (Fo. 10)
KO-tr-Kaliba and all all all and all all all and all all all all all all all all all al					-	
If Potential is not at maximum, please explain:	o e lesa					
Vegetation Condition Index						
Sum all scores and divide by the total possible for the assessment area vegetation).	a. 60 for site	s with woody s	pecies (shrubs	and tree); 30 for sites	with only he	rbaceous
Only Herbaceous (4.1-4.3):+ =/30		3	7/6			
For Herbaceous and woody vegetation (4.1- 4.6): $ (                                  $	stantial +	S/ 140 \ 16	-0/07			.67

5.1 Algae and Duckweed Large patches means 50%	Algae growth is minimal		gae growt atches	h in small	nis section if water Algae growth in large   4	oatches	High level of algae growth in continuous mats with odor from rotting vegetation 0
5.2 Is Wetland Dominated by Cattails? *Dominated means 70% Do not include any open water component.	Yes 4	N	0 (10				
5.3 Sediment and Turbidity	98000 - 4740 -	9399888 PM		. John Schlieberg	Region of the second		
5.3a is there evidence of excessive sediment levels caused by human activities? (e.g. bare ground, row crops, erosion, etc. Do not include trapped sediment due to beaver damming)	No evidence / Slight 10	Moderal 4	te	High 0	Average Sedimei	:	rbidity Score:
5.3b is the Water Turbid?	No Turbidity/ Mod Slight 10		8 6		10 9 8		6 5 4 3 2 0 .
5.4 Surface oils & foams *Do not consider sheen for vegetation decomposition (Should be evidence of human caused source)	No evidence of su or foams	rface oils	Eviden	ce of surface	oils or foams	The wetla	nd is covered with surface oils or foams 0
5.5 Toxics- (e.g. Metals from mine tailings, hydrocarbon organic materials, or, Pesticides)	No evidence of tox	ics	Eviden abunda	ce of toxics, h ant and divers	nowever aquatic life is se 5	Evidence Only toler	of toxics. ant aquatic life are found
5.6 Salinity *Conductivity measurements are not necessary	No evidence of sal Conductivity < 3000 uS/cm	ine seeps	Conduc	ctivity	of saline seeps	Conductiv	
5.7 Are saline seeps, fallow croplands, oil brines, or severe overgrazing present within 3 miles? Yes No Not Sure	10	)	3000-15000 uS/cm		5	>15000 uS/cm 0	
Water Quality Condition Index: Sum the	owest 2 scores (5	1-5.6) and	d divide b		+_8_=_/5_/	20 =	0.75
Please comment on any individual scores < 6:							

6.0 Buffer Condition/ Degree of Stress Stressors in 100 meter buffer None present Common Very apparent and extensive Very few present Occurrence Distribution /Minimal Large patches within Extensive Large Patches throughout entire Buffer Small Patches Buffer 6.1 Amount of bare ground Slope Slope Slope Flat 6 Moderate 4 Steep 3 Flat 10 Moderate 2 Flat= <2 percent grade Steep 6.2 Noxious weeds 2 (10)0 (Use Montana Noxious Weed Pamphlet) 6.3 Disturbance- caused undesirable 4 0 10 plants Moderate= 2-10 percent Grade Degree of Stress in Buffer None Moderate Severe Occurring/Slight 6.4 Grazing intensity Steep= >10 percent grade 10 Slope Slope in 100 meter buffer Flat Flat Moderate Moderate 2 Steep Steep 6.5 Recreational Activities (e.g. Slope Slope campground, fishing access point, Flat Flat Moderate etc.) Moderate 2 Steep Steep

Percent of 100m buffer occupied by stressor	0%	1-25%	26-50%		>50%		
6.6 Hayfield	10	(8)	6 .		4		
6.7 Row Crops	10	Slope Flat 7 Moderate 5 Steep 4	Slope Flat 4 Moderate 2 Steep 1		Slope Flat 2 Moderate 0 Steep 0		
6.8 Clear cuts, new growth less than 3 feet tall	(10)	Slope Flat 7 Moderate 5 Steep 4	7 Fiat 5 lerate 5 Moderate 3		Slope Fiat 3 Moderate 1 Steep 0		
6.9 Feedlot or concentrated livestock watering	(10)	3	2		0		
6.10 Residential Development	10	(9)	6		0		
6.11Human constructed dams or dikes: often indicates unnatural wetlands	Not Present	Present 7					
	None Present	1-5%	6-25%	200	>25%		
6.12 Human- induced saline seeps were observed	(10)	7	4		0		
6.13 Industrial or Commercial Activities	10	7	(4)		0		
6.14 Oil and Gas Development	(10)	7	4		0		
3.15 Were any of these stressors of	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		d? (Please circle)				
Row Crops	Oil and Gas Develop	ment	Recreational Activities (e	e.g. campground, fi	shing access point, etc.)		
luman- induced saline seeps	Hayfield	···	Feedlot/concentrated liv	estock watering			
ndustrial or commercial Activities	Roads/ Railroad Grad	les	Clear cuts (new growth I	ess than 3 feet tall)	1		
Residential Development	Dams or Dikes upstre	angular a and parket. The	p 5				
Distance of road from wetland	Danis of Dires above		51-100 meters	11-50 met			
6.16 2-track dirt road Up Slope		(10)	6	4	ters <=10 meters		
6.17 Other 2-track dirt road		10	8		4		
6.18Dirt and gravel roads, railroad gra	don Un Clono	7000		6			
		10	4 2		(1)		
6.19All other dirt and gravel roads, rail	iroad grades	10	6	4	(2)		
6.20Paved Roads Up Slope		10	2	1	(0)		
3.210ther Paved Roads		10	4	2	(1)		
Buffer Condition Index Sum the four lowest scores circled ar Assessment area (40).	nd divide by the total	•			0.1		
7.0 Restorability Circle the ap	propriate category a	nd sub-category and de	scribe how the wetland is				
we consider a second of the se	Category B:		Category C  More significant impacts or disturbances within the buffer area that can be removed (such as a change in land use practices: e.g. crop land changed to pasture, cattle tank or abundant noxious weeds)  Restoration would require some expense				
7.1 How casily can he wetland be restored?  Category A: No observed impacts: Wetland does not nee to be restored.	Some slight im	pacts that more signiful restored within the busy spense adding e.g. crop la tank or abu	cant impacts or disturbar uffer area that can be rei change in land use practi nd changed to pasture, c ndant noxious weeds)	nces Seri- moved are i ices: remains fixed	ous impacts and stressors not economically feasible to ove/restore. (e.g., highway o		

7.3 Ra	nk Stressors - Choose from the list and rank all startin	ng with 1 (highest)		
4	Grazing Poir	nt Source Contamination	Oil/Gas Developm	nent
		idential Development	5 Dredging/Filling	
2	· · · · · · · · · · · · · · · · · · ·	nan Recreation	Feedlot/Cattle Wa	itering
1		ıstrial Development	De-Watering	•
		estry/Clear cutting	Hay Meadow	
	Extensive Noxious Weeds			
	Sı	ummary of Rating		
Hydrog	geomorphic Condition Index			0.27
Vegeta	tion Condition Index			0.62
Water	Quality Condition Index			0.75
Buffer	Condition/Stressor Score	4		0.1
Wetlan	d Impact Score Calculation:		•	
If there	is surface water multiply the hydrogeomorphic condition index by 0.2.	ition index by 0.4; the vegetation	on condition index by 0.4; the w	ater quality
If there	is no surface water multiply the hydrogeomorphic co	ondition index by 0.5; the veget	ation condition index by 0.5.	
Wetla	ind Impact Score			0.5/
Overal	Score calculations:			
If there index b	is surface water multiply the hydrogeomorphic condi y 0.2; and the buffer condition/ Stressor index by 0.2.	ition index by 0.3; the vegetation. Sum the indexes to determin	n condition index by 0.3; the we the overall condition index so	rater condition core.
If there Stresso	is no surface water multiply the hydrogeomorphic co r index by 0.2; Sum the indexes to determine the ov	ndition index by 0.4; the veget verall condition index score.	ation condition index by 0.4; the	e buffer condition/
Overa	ıll Score	********************		0.46
* This can be condit	score is not an indication of wetland impairm submitted to Department of Environmental ( ion.	nent status. This form is us Quality for professional re	sed to record observations view to assist in evaluating	only. The form I wedland
Overall	condition index >0.9-1.0: Excellent Condition	Overall condition index	>0.5-0.7: Fair condition	
Overali	condition index >0.7-0.9: Good Condition	Overall condition index	0.0-0,5: Poor Condition	

ite Number					15	And a factor of a control of the second of the				····	
		001.1				ssessment Number		01			
ite Name		U.S. 2				ate	20 00 11 20 00	May	11,200	.7	
and Ownership		VARIOL	5		Pe	erson(s) Assessing	Wetla	and & A	Affiliations	75.5	julius sijas
UC 4th/5th Code						COLIN MacLAE	احشاد				
JC 4th/5th Name						OLIN I TOUR	-0 10		Para	netrix	Tar
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∍neral Site De	escripti	On (Location	, Wildlife Obser	vations, Beaver Acti	vity, Outstandir	ng Features, Vegetative Ty	pes o	bserved i	mpacts, etc.);		
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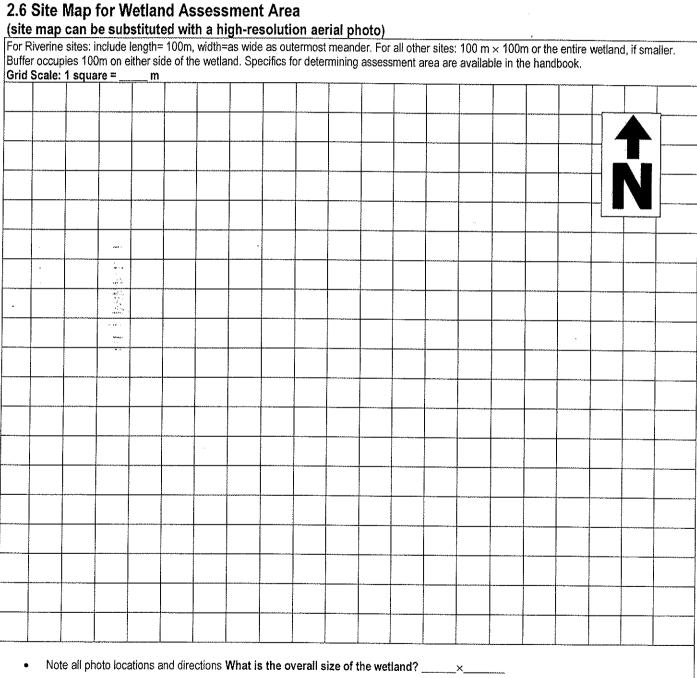
# 1.0 Wetland Classification

1.1 Wetland is being assessed to reflect (Circle)	1.2 HGM Classification (Circle one Class or Subclass)						
Natural Wetland Type (assess potential)	Riverine	Depressional	Lacustrine Fringe	Slope	Mineral Soil Flats		
(Altered Wetland Type (assess capability)	Upper Perennial	Closed		Open Spring	Playa Lakes		
Completely Altered (no longer functioning as a wetland,	Lower Perennial	Open groundwater		Riverine Spring			
and it is not feasible to survey wetland condition)  *What alterations have been made?	Non-Perennial,	Open surface water		Fen			
Trial alterations have been inage?	Intermittent or Ephemeral			Wet Meadow			

						f all categories present	
System	Subsystem	Class	Water Regimes	Modifiers	Percent	Determine the wetland area by locating the boundary	Types of Water Regimes and Modifiers
Riverine \		Rocky Bottom				where wetland dependent	Water Regimes - Choose the regime that
(Stream)		Unconsolidated Bottom	()	$\sim$	100	vegetation meets vegetation	is most common in the area.
	/ Lower Perennial \	Aquatic Bed		7		and features not characteristic of wetlands (See guidebook for more information)	A Temporarily Flooded
	(Larger Tributary)	Emergent Wetland					B Saturated
	1.	Rocky Shore					C Seasonally Flooded
	The second secon	Unconsolidated Shore					D Seasonally Flooded/Well Drained
		Rocky Bottom				·	E Seasonally Flooded/Saturated
Unner Perennial	Unage Desagniol	Unconsolidated Bottom				Do not include limnetic subsystems which are deep water habitats that are greater than 2 meters (6.6	F Semipermanently Flooded
	Upper Perennial (Smaller Tributary)	Aquatic Bed					U Unknown
		Rocky Shore					
		Unconsolidated Shore					Modifiers
	Intermittent	Stream Bed				feet) or the maximum extent	g excavated
Lacustrine	Limnetic	Rocky Bottom				of nonpersistent emergents.  If these grow at depths greater than 2 m.	h impounded
(Lake)	(Deepwater habitat)	Unconsolidated Bottom					i diked
		Aquatic Bed					j partly drained
		Rocky Bottom					k farmed
	Littoral	Unconsolidated Bottom					I artificial dam
	/Potygon Shara and	Aquatic Bed					m beaver dam
	Deepwater Habitat)	Emergent Wetland					o diverted
	Deepwater Habitat)	Rocky Shore					p rip rap
		Unconsolidated Shore					
Palustrine		Rocky Bottom					Aquatic Bed = plants growing in water
(Pond or riparia	an)	Unconsolidated Bottom					Rocky Bottom/ Shore = cobble or rock
		Aquatic Bed					along Shore
		Emergent Wetland					Unconsolidated Bottom/ Shore = muddy
		Rocky Shore					Emergent = grasses, sedges, rushes, etc
		Unconsolidated Shore					Scrub-Shrub = Bushes, Vegetation less
		Moss-Lichen Wetland					than 20ft tall
		Scrub-Shrub Welland					Forested = woody vegetation that is 6 m
		Forested Wetland					tall or taller

	re Fish Present?	Yes No			s (if known)?		·	
2.2 An	nphibian and Aquat	ic Reptile Species	Observed - check	and describe life st	age below: Ec	igs, tadpole, adult		
Comm	on Name L	ife Stage	Common Nam	e Life Stage		Common Name	Life Stage	
Boreal (	Chorus Frog		Snapping Turtle	<b>.</b>		Long-toed Salamander		
ullfrog			Spiny Softshell			Northern Leopard Frog		
oeur D	'Alene Salamander		Tiger Salamander			Pacific Treefrog		
olumbi	ia Spotted Frog		Western Hognose Si	nake		Painted Turtle		
	n Gartersnake		Terrestrial Gartersna	ke		Plains Garter Snake		
reat Pl	lains Toad		Western Toad			Plains Spadefoot		
Vestern			Woodhouse's Toad			Rocky Mtn Tailed Frog		
	Greensnake		Other (describe if un	known):				
.3 Es	timate the Percent	of Standing Water	garagenaleria.					
ercenta	age of standing water bod	y < 50 cm depth	0	1-25	26-50	51-75	(76-100)	
ercenta	age of standing water bod	y 50-200 cm depth	0	1-25	26-50	51-75	76-100	
Percentage of standing water body >200 cm depth		0	(1-25)	26-50	51-75	76-100		
2.4 T	hreatened or Endan	gered Species Ob	served - check if p	resent and describ	e in the space	provided below		
	Species	Region Found	0880/001880608080808080808	lakapadag gyer (sagar)	e santa anti-	<del></del>	Status	
	Least Tern	Near Fort Peck Dam 8	Miles City	······································			Endangered	
	Whooping Crane	Northeastern Montana				·	Endangered	
							Threatened	
	Bald Eagle	Entire region					inicalcies	
	Bald Eagle Piping Plover	North-central and Eas	tern portions of the state				Threatened	
		North-central and Eas Northeastern Montana						
	Piping Plover	North-central and Eas					Threatened	
	Piping Plover Black-Footed Ferret	North-central and Eas Northeastern Montana Entire region Entire region					Threatened Endangered	
	Piping Plover Black-Footed Ferret Canada Lynx	North-central and Eas Northeastern Montana Entire region Entire region			rroot Selway Eco	systems	Threatened Endangered Threatened	
	Piping Piover Black-Footed Ferret Canada Lynx Gray Wolf	North-central and Eas Northeastern Montana Entire region Entire region Greater Yellowstone, I Entire Region	Northern Continental Div	ide, Cabinet-Yaak, Bitte	rroot Selway Eco	systems	Threatened Endangered Threatened Threatened/Endangered	
	Piping Plover Black-Footed Ferret Canada Lynx Gray Wolf Grizzly Bear Bull Trout Pallid Sturgeon	North-central and Eas Northeastern Montana Entire region Entire region Greater Yellowstone, I Entire Region Fort Peck & Yellowsto		ide, Cabinet-Yaak, Bitte	rroot Selway Eco	systems	Threatened Endangered Threatened Threatened/Endangered Threatened Threatened Endangered	
	Piping Plover Black-Footed Ferret Canada Lynx Gray Wolf Grizzly Bear Bull Trout Pallid Sturgeon White Sturgeon	North-central and Eas Northeastern Montana Entire region Entire region Greater Yellowstone, I Entire Region Fort Peck & Yellowsto Kootenal River	Northern Continental Div ne River below Powder F	ide, Cabinet-Yaak, Bitte	rroot Selway Eco	systems	Threatened Endangered Threatened Threatened/Endangered Threatened Threatened Endangered Endangered	
	Piping Plover Black-Footed Ferret Canada Lynx Gray Wolf Grizzly Bear Bull Trout Pallid Sturgeon	North-central and Eas Northeastern Montana Entire region Entire region Greater Yellowstone, I Entire Region Fort Peck & Yellowsto	Northern Continental Div ne River below Powder F	ide, Cabinet-Yaak, Bitte	rroot Selway Eco	systems	Threatened Endangered Threalened Threatened/Endangered Threatened Threatened Endangered	

2.5 Check am	t of surface	area of any e	mergent ve	getation				<b>A</b>	
Туре	1-25%	25-50%	50-75%	76-100%		munumun munumun munumun	Grasses	$\uparrow$	Trees
Sedges Cattails					END		Sedges	←()	Photo
Grasses Rushes	<u>/</u> .				LEG			SME	Shrubs
Waterlilies Shrubs	-,/				-		Rushes Fence	5mm2	Assessment
Trees	<i>V</i>						rence		Boundary
Other					Please	describe:			



3.0 Hydrogeomorphology Condition

Degree of hydrologic disturbance (All Wetland Types)	Non Occurring/Slight	Moderate	Severe			
3.1 Degree of wetland surface or subsurface flow patterns that has been "negatively" aftered by human disturbance (e.g., roads, buildings, rip rap, levees, bridges approaches, weirs, dams, etc.) "Consider how structures accommodate safe passage of flows (e.g., lower the rating if headcuts are affecting dam or spillway)	. 10	4	0			
3.2 Degree of wetland habital negatively altered by addition or withdrawal for irrigation, livestock watering, drainage, etc  *Consider impacts from any abnormal fluctuating water levels.	10	4	0			
$3.3$ Amount of wetland habital negatively aftered by dredging or $_{\mbox{\scriptsize filling}}$	10	4	0			
3.4 Percent of assessment area and the degree to which the wetland is disturbed by pugging or hummocking from animal hooves  Slight= Pugging is minimal or shallow/Hummocking has occurred/Vegetation and bank stability is intact or recovering Moderate= Pugging is minimal/Hummocks are deep/Pugging is beginning to dry out Severe= Hummocks are deep/ Pugging is common/Vegetation is dead or absent	<=25%  None Occurring 10  Slight 9  Moderate 6  Severe 5	26-75%  Slight 7  Moderate 4  Severe 2	76-100%  Slight 5  Moderate 3  Severe 1			
Hydrogeomorphic Condition Index For hydrologic disturbance take the sum of the lowest 2 scores (3.1-3.4) and divide by 20: +/20 =(						
*For Riverine Sites use average of Riverine and Hydro- Please provide comments for any impacts that scores <	geomorphology Indexes. :5: <u>Man-Maxde /</u>	icigation canals				

Hydrogeomorphology - Riverine Wetland Addendum (Include only for Riverine Wetlands)

8 6 4 2 0 Actual 6 4 2 0 Actual 8 6 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	(8) 6 4 2 0 Potential (8) 5 3 0 Potential (6) 4 2 0 Potential
6 4 2 0 Actual 8 5 3 0 Actual 6 4 2 0 Actual 8 6 4 4	6 4 2 0 Potential 8 5 3 0 Potential 6 4 2 0
4 2 0 Actual 8 5 3 0 Actual 6 4 2 0 Actual 8 6 4	4 2 0 Potential 8 5 3 0 Potential 6 4 2
2 0 Actual 8 5 3 0 Actual 6 4 2 0 Actual 8 6 4	2 0 Potential 8 3 0 Potential 6 4 2
0 Actual (8) 5 3 0 Actual (6) 4 2 0 Actual 8 6 4	0 Potential 8 5 3 0 Potential 6 4 2 0
Actual  (8)  5  3  0  Actual  (6)  4  2  0  Actual  8  6  4	Potential
8 5 3 0 Actual 6 4 2 0 Actual 8 6 4	8 5 3 0 <b>Potential</b> 6 4 2 0
5 3 0 Actual 2 0 Actual 8 6	5 3 0 Potential 6 4 2 0
3 0 Actual 6 4 2 0 Actual 8 6	3 0 Potential 6 4 2 0
0 Actual  2 0 Actual 8 6 4	0 Potential 6 4 2 0
Actual  2 0 Actual 8 6 4	Potential
4 2 0 <b>Actual</b> 8 6 4	4 2 0
4 2 0 <b>Actual</b> 8 6 4	4 2 0
0 Actual 8 6 4	0
Actual 8 6 4	
8 6 4	Potential
6 4	
4	8
	6
	4
2	2
0)	(0)
Actual	Potential
6	6
4	4
2	2
(0)	(0)
Actual	Potential
6	6
4	4
2	2
0.)	(0)
	4 2 0 Actual 6 4 2

4.0 Vegetation Condition \*Vegetation should only be assessed within the wetland assessment area

10

4.0 Vogetation Contained Vegetation should only be assessed within the welland assessment area								
4.1 Bare Ground	None present/ Minimal	Some Present	Common Occurrence	Very apparent				
	<=5%	6-15%	16-25%	>25%				
How much emergent vegetation is								
impacted by trampling or other	10	8	4	/ 0 \				
human-caused disturbance?								

\*For Noxious and Disturbance Caused Undesirable plants, look to the abundance of harmful species. Patches are large and 4.2 Invasive and Disturbance caused Some small patches are Patches are large or undesirable plants None present often present commonly present extensive or Wetland is (Rank 3 most common and check all other <=5% 6-25% Dominated observations) >25% \_\_\_Reed Canary grass Meadow Foxtail 3\_Tall Fescue 2 Smooth brome 7 Quack grass Timothy 10 5 2 Sweet Clover \_Kentucky bluegrass Creeping Bent grass ✓ Russian Olive 4.3 Noxious Weeds Some small patches are Patches are large or Patches are large and (Rank 3 most common and check all other None present often present extensive or Wetland is commonly present observations) <=5% 6-25% Dominated >25% Tamarisk (Salt Cedar) Leafy Spurge

Is woody vegetation present? Yes No / \*Skip the rest of this section if the site does not have the potential for tall shrubs or trees or woody vegetation is not present due to natural causes (not human impacts or removal).

6

3

4.4 Woody Species Establishment and Regeneration	Actual	Potential
All age classes of desirable woody species present (see Guidebook).	10	10
One age class of desirable woody species is clearly absent, all others well represented. Often, it will be the middle age group(s) absent.	6	6
Two age classes (seedlings and saplings) of native shrubs and/or two age classes of native trees are clearly absent, or the stand is comprised of natinly mature species. Other age classes well represented.	-4	4
Disturbance induced, (i.e., facultative, facultative upland species such as rose, or snowberry) or non-wetlands dominate. Woody species present consist of decadent/dying individuals	2	2
A few woody species are present (<10% canopy cover), but herbaceous species dominate (at this point, the site potential should be re-evaluated to ensure that it has potential for woody vegetation). OR, the site has at ≥ 5% canopy cover of Russian clive and/or salt cedar.	0	0
4.5 Utilization of trees and shrubs:	Actual	Potential
Few to none of the available second year and older stems are browsed	10	10
Second year and older stems lightly browsed	8	8
Second year and older stems are moderately browsed.	6	6
Second year and older stems are heavily browsed. Many of the shrubs have either a "clubbed" growth form, or they are high-lined or umbrella shaped.	2	2
There is noticeable use (10% or more) of unpalatable and normally unused woody species	0	0
4.6 Percent of physical removal of tree/shrub layer or <=5% 6-25% 26-50% 51-75%		76-100%
dead wood caused by concentrated livestock trampling and rubbing,		0
frying out of site due to stream incisement, human-caused welland 10 8 5 2  Irainage or flooding, etc.  Please provide comments for any individual scores less than 6:		

١	/enetation	ո Conditio	n Inday
ч	CUCLALIU	: CUITUILI	/II III/UCA

\_Canada Thistle

White Top Cress

\_Spotted Knapweed

Sum all scores and divide by the total possible for the assessment area. 60 for sites with woody species (shrubs and tree); 30 for sites with only herbaceous vegetation).

Only Herbaceous (4.1-4.3):  $\bigcirc$  +  $\bigcirc$  +  $\bigcirc$  =  $\bigcirc$  /30

Purple Loosestrife

\_Yellowflag Iris \_Eurasian Milfoil

For Herbaceous and woody vegetation (4.1-4.6):

/10 + /10 + /10 +actual/potential + actual/potential + /10 )/6 =

04

0

5.0 Water Quality: Is water pre		No	0	_ *Skip th	nis section if water	er is not	present
5.1 Algae and Duckweed Large patches means 50%	Algae growth is minimal		gae grow etches	ofth in small	Algae growth in large	patches	High level of algae growth in continuous mats with odor from rotting vegetation
5.2 Is Wetland Dominated by Cattails? *Dominated means 70% Do not include any open water component.	Yes 4	No	0 (10	o)			
5.3 Sediment and Turbidity	นสร้างให้สามารถ เล่า ค	vwiást nic			Augusty and a		
5.3a Is there evidence of excessive sediment levels caused by human activities? (e.g. bare ground, row crops, erosion, etc.,Do not include trapped sediment due to beaver damming)	No evidence / Slight 10	Moderat	te	High 0	Average Sedime		rbidity Score:
5.3b Is the Water Turbid?	No Turbidity/ Slight 10	Moderat 8	-	High 6	10	10 9 8 7 6 5 4 3 2 0	
5.4 Surface oils & foams Do not consider sheen for vegetation decomposition (Should be evidence of human caused source)	No evidence of sur or foams	face oils	Evider	l nce of surface	oils or foams	The wetla	and is covered with surface oils or foams
5.5 Toxics- (e.g. Metals from mine tailings, hydrocarbon organic materials, or, Pesticides)	No evidence of toxics		Evidence of toxics, h abundant and divers		however aquatic life is Evidence se Only tole		of toxics. ant aquatic life are found
5.6 Salinity Conductivity measurements are not necessary	No evidence of sal Conductivity	ine seeps	Condu	ctivity	of saline seeps	Significant evidence of saline seeps Conductivity	
5.7 Are saline seeps, fallow croplands, oil brines, or severe overgrazing present within 3 miles? Yes No (Not Sure)	< 3000 uS/cm 10		3000-1500Ó uS/cm		5	>15000 u	S/cm 0
Nater Quality Condition Index: Sum the	owest 2 scores (5.	1-5.6) and	l divide l		+8 = 15 1	20 =	0.75
Please comment on any individual scores < 6:	·	~ <b></b>					

6.0 Buffer Condition/ Degree of Stress
Stressors in 100 meter buffer None present

Stressors in 100 meter buffer	None present Very few present /Minimal Small Patches	Common Occurrence Large patches within Buffer	Very apparent and extensive Distribution Extensive Large Patches throug	hout entire Buffer
6.1 Amount of bare ground	10	Slope Flat 6 Moderate 4 Steep 3	Slope Flat 4 Moderate 2 Steep 1	Slope Flat= <2 percent grade
6.2 Noxious weeds (Use Montana Noxious Weed Pamphlet)	(10)	2	0	
6.3 Disturbance- caused undesirable plants	10	4)	0	Moderate= 2-10 percent Grade
Degree of Stress in Buffer	None Occurring/Slight	Moderate	Severe	
6.4 Grazing intensity in 100 meter buffer	10	Slope Flat 7 Moderate 5 Steep 4	Slope Flat 4 Moderate 2 Steep 1	Steep= >10 percent grade
6.5 Recreational Activities (e.g. campground, fishing access point, etc.)	(10)	<b>Slope</b> Flat 7 Moderate 5 Steep 4	Slope Flat 4 Moderate 2 Steep 1	

Percent of 100m buffer occupied by stressor	0%	1-25%	26-50%			>50%
6.6 Hayfield	10	(8)	6			4
6.7 Row Crops	10	Slope Flat 7 Moderate 5 Steep 4	Slope Flat 4 Moderate 2 Steep 1		Slope Flat 2 Moderate 0 Steep 0	
6.8 Clear cuts, new growth less than 3 feet tall	10	Slope Flat 7 Moderate 5 Steep 4	Slope Flat 5 Moderate 3 Steep 2		Siope Flat 3 Moderate 1 Steep 0	
6.9 Feedlot or concentrated livestock watering	(10)	3	2			0
6.10 Residential Development	10	(9)	6			0
6.11Human constructed dams or dikes: often indicates unnatural wetlands	Not Present	Present 7				
	None Present	1-5%	6-25%	1000		>25%
6.12 Human- induced saline seeps were observed	(10)	7	4			0
6.13 Industrial or Commercial Activities	10	7	(4)			0
6.14 Oil and Gas Development	(10)	7	4			0
6.15 Were any of these stressors o	bserved within 100-	500m from the Wetlan	d? (Please circle)			
Row Crops	Oil and Gas Developr	nent	Recreational Activities (	e.g. campground, f	fishing access p	point, etc.)
Human- induced saline seeps	(Hayfield)	Page	Feedlot/concentrated liv	estock watering		
Industrial or commercial Activities	Roads/ Railroad Grad	les	Clear cuts (new growth	ess than 3 feet tal	))	
Residential Development	Dams or Dikes upstre	eam (Riverine Sites)				
Distance of road from wetland	Dan Dinasa Kas	> 100 meters	51-100 meters	11-50 me	ters	<=10 meters
6.16 2-track dirt road Up Slope		10	6	4		(2)
6.17 Other 2-track dirt road		10	8	6		(4)
6.18Dirt and gravel roads, railroad gra	ades Up Slope	10	4	2		(1)
6.19All other dirt and gravel roads, ra	ilroad grades	10	6	4		(2)
6.20Paved Roads Up Slope		10	2	1		(0)
6.210ther Paved Roads		10	4	2		
Buffer Condition Index Sum the four lowest scores circled a Assessment area (40).						0.10

7.0 Restorability Circle the appropriate category and sub-category and describe how the wetland is trending (when appropriate)

7.1 How	Category A:	Category B:	Category C	Category D:
easily can	No observed impacts;	Some slight impacts that	More significant impacts or disturbances	Serious impacts and stressors
the wetland	Wetland does not need	can be fixed or restored	within the buffer area that can be removed.	are not economically feasible to
be restored?	to be restored.	with minimal expense	(such as a change in land use practices:	remove/restore. (e.g., highway or
		and effort (e.g. adding	e.g. crop land changed to pasture, cattle	fixed permanent infrastructure)
		fencing).	tank or abundant noxious weeds)  Restoration would require some expense	
			and effort.	The state of the s
7.2 Wetland	Sub-Category 1:	Sub-Category 2:	Sub Category 3:	Sub-Category 4:
Trend	Wetland condition is	Wetland condition	Wetland condition is trending downward.	Wetland condition trend can not
towards	trending upward.	appears to be stable.		(be determined /
natural				
restoration				
Comments:		<u> </u>		

7.3 Rank Stressors - Choose from the list and rank all starting wit	h 1 (highest)	A contract of the second	
Grazing Point Sou Mining Residenti Row Crops Human R Road/Railroad(s) Industrial	rce Contamination al Development	Oil/Gas Developm Dredging/Filling Feedlot/Cattle Wa De-Watering Hay Meadow	
Sumn	nary of Rating		
Hydrogeomorphic Condition Index			05
Vegetation Condition Index			0,4
Water Quality Condition Index	• • • • • • • • • • • • • • • • • • • •	,,,,,,,,,	0.75
Buffer Condition/Stressor Score			0,1
Wetland Impact Score Calculation:  If there is surface water multiply the hydrogeomorphic condition i condition index by 0.2.  If there is no surface water multiply the hydrogeomorphic condition			ater quality
Wetland Impact Score		•••	0.5/
Overall Score calculations:  If there is surface water multiply the hydrogeomorphic condition in index by 0.2; and the buffer condition/ Stressor index by 0.2. Sur If there is no surface water multiply the hydrogeomorphic condition Stressor index by 0.2; Sum the indexes to determine the overall	n the indexes to determine the on index by 0.4: the vegetation	e overall condition index so	ore.
Overall Score			0.44*
* This score is not an indication of wetland impairment scan be submitted to Department of Environmental Qualicondition.	status. This form is used t ty for professional review	o record observations to assist in evaluating	only. The form wedland
Overall condition index >0.9-1.0: Excellent Condition	Overall condition index >0.5-	0.7: Fair condition	
Overall condition index >0.7-0.9: Good Condition	Overall condition index 0.0-	0,5: Poor Condition	

Montana DEQ - Wetland Rapid Assessment Form (Version 2.0

Site Number	001.3	Assessment Number	01
Site Name	U.S. 20-26	Date	May 11, 2007
Land Ownership	VARIOUS	Person(s) Assessing Wet	land & Affiliations
HUC 4th/5th Code			
HUC 4th/5th Name		COLIN MacLAREN Tina Fairelly	Parametrix, Inc.
Elevation (ft)		Tina Facrelly	rarameri ix, inc.
Location Informati	on and the second s	,,,,,,	
UTME			
UTM N	*		
Datum	NAD27 UTM Zone 11		
	NAD83 12		
	Other: 13		•
GPS ID			
GPS error (inc			
General Site De	escription (Location , Wildlife Observations, Beaver Activity, Outst	anding Features, Vegetative Types,	observed impacts, etc.):
Emela	gent wetland located on either s	ide of unnamed i	crigation canal west
~ ? Pl	ryllis Canal, south of 20-26.		
<u>Ste</u> 15	a low-lying pasture used for graz	ing. Surface and	1 passibly subsurface
waters	trom unnamed canal appear +	o contribute hudio	long to successfine
field. L	Netlands appear contined to the	area immediatelu	adjacent to conni
<u>exton</u>	ding approximately 25 on eit	nec side.	
	<u> </u>		
· · · · · · · · · · · · · · · · · · ·			
		, <u>;</u>	

### Photos:

Photo#	Direction Facing	Description of what is in the photo	
			·

# 1.0 Wetland Classification

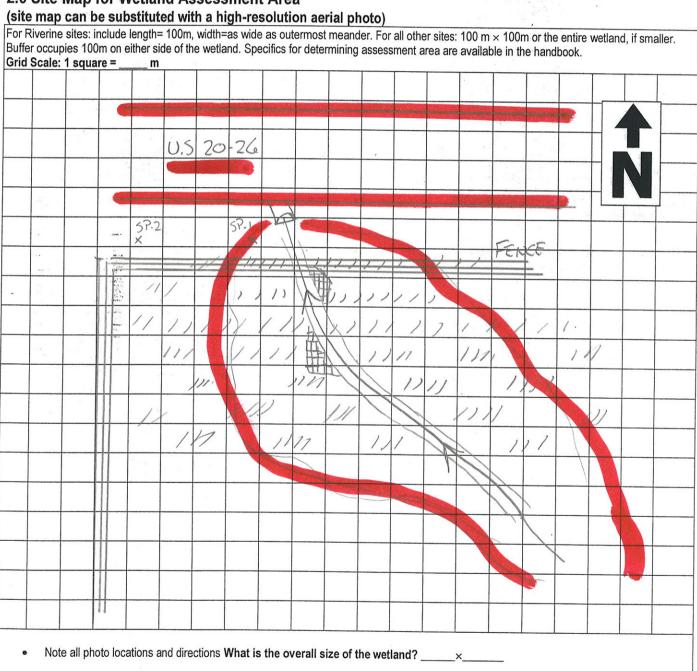
1.1 Wetland is being assessed to reflect (Circle)	1.2 HGM Classific	ation (Circle one Class o	r Subclass)		
Natural Wetland Type (assess potential)  (Altered Wetland Type (assess capability)  Completely Altered (no longer functioning as a wetland, and it is not feasible to survey wetland condition)  *What alterations have been made?	Riverine Upper Perennial Lower Perennial Non-Perennial, Intermittent or Ephemeral	Depressional Closed Open groundwater Open surface water	Lacustrine Fringe	Slope Open Spring Riverine Spring Fen Wet Meadow	Mineral Soil Flats Playa Lakes

System	Subsystem	Water Regime, Modifi	Water	Modifiers	Percent	Determine the wetland area	
			Regimes		, 0,00,10	by locating the boundary	Types of Water Regimes and Modifiers
Riverine		Rocky Bottom				where wetland dependent	Water Regimes - Choose the regime that
(Stream)		Unconsolidated Bottom				vegetation meets vegetation	is most common in the area.
	Lower Perennial	Aquatic Bed				and features not	A Temporarily Flooded
	(Larger Tributary)	Emergent Wetland				characteristic of wetlands	B Saturated
		Rocky Shore		, and the second		(See guidebook for more	C Seasonally Flooded
United Personal		Unconsolidated Shore				information)	D Seasonally Flooded/Well Drained
		Rocky Bottom				ĺ	E Seasonally Flooded/Saturated
	Upper Perennial	Unconsolidated Bottom				Do not include limnetic	F Semipermanently Flooded
	(Smaller Tributary)	Aquatic Bed				subsystems which are deep water habitats that are greater than 2 meters (6.6 feet) or the maximum extent of nonpersistent emergents. If these grow at depths	U Unknown
(Strialler Tribute	(Smaller (moutary)	Rocky Shore					
		Unconsolidated Shore					Modifiers g excavated
	Intermittent	Stream Bed					
Lacustrine	Limnetic	Rocky Bottom					h impounded
(Lake)	(Deepwater habitat)	Unconsolidated Bottom					i diked
		Aquatic Bed				greater than 2 m.	i partly drained
		Rocky Bottom					k farmed
	Littoral	Unconsolidated Bottom					l artificial dam
	(Rotugon Shore and	Aquatic Bed					m beaver dam
	Doonwater Habitati	Emergent Wetland					o diverted
	' '	Rocky Shore					p rip rap
- warmen		Unconsolidated Shore					
Palustrine \		Rocky Bottom					Aquatic Bed = plants growing in water
(Pond or ripari)	n)	Unconsolidated Bottom					Rocky Bottom/ Shore = cobble or rock
		Aquatic Bed		,		!	along Shore
		Emergent Wetland)	<u> </u>	K	100		Unconsolidated Bottom/ Shore = muddy
		Rocky Shore					Emergent = grasses, sedges, rushes, etc.
		Unconsolidated Shore					Scrub-Shrub = Bushes, Vegetation less
		Moss-Lichen Wetland					than 20ft tall
		Scrub-Shrub Welland					Forested = woody vegetation that is 6 m
		Forested Wetland					tall or taller

2.1 Are Fish Present			Specie	s (if known)?			
2.2 Amphibian and Ac	uatic Reptile Species	Observed - check and	describe life st	age below: Ec	gs, tadpole, adult		
Common Name	Life Stage	Common Name	Life Stage		Common Name	Life Stage	
oreal Chorus Frog		Snapping Turtle			Long-toed Salamander		
ullfrog		Spiny Softshell			Northern Leopard Frog		
eur D'Alene Salamander		Tiger Salamander			Pacific Treefrog		
lumbia Spotted Frog		Western Hognose Snake			Painted Turtle		
mmon Gartersnake		Terrestrial Gartersnake			Plains Garter Snake		
eat Plains Toad		Western Toad			Plains Spadefoot		
estern Skink		Woodhouse's Toad			Rocky Mtn Tailed Frog		
nooth Greensnake		Other (describe if unknow	n):				
3 Estimate the Perce	ent of Standing Water	petang.		erin er og formert i 22. Sent og er og formert i 12.			
rcentage of standing water	body < 50 cm depth	(0)	1-25	26-50	51-75	76-100	
Percentage of standing water body 50-200 cm depth		( <u>0</u> )	1-25	26-50	51-75	76-100	
Percentage of standing water body >200 cm depth		(0)	1-25	26-50	51-75	76-100	
2.4 Threatened or En	dangered Species Ol	served - check if prese	nt and describ	in the snace	provided helow		
neck Species	Region Found	Charles Automotive and the second of the sec	gajid diplota ya, mon		·	Status	
Least Tern	Near Fort Peck Dam		······	······································		Endangered	
Whooping Cran	e Northeastern Montana	3				Endangered	
0.115	Entire region						
Bald Eagle						Threatened	
Bald Eagle Piping Plover	PROTEIT-CETTERS AND LESS	Black-Footed Ferret Northeastern Montana				Endangered	
Piping Plover		<u> </u>				Threatened	
Piping Plover Black-Footed Fer Canada Lynx	ret Northeastern Montana Entire region						
Piping Plover Black-Footed Fen Canada Lynx Gray Wolf	ret Northeastern Montana Entire region Entire region					Threatened/Endangered	
Piping Plover Black-Footed Fer Canada Lynx Gray Wolf Grizzly Bea	ret Northeastern Montana Entire region Entire region ir Greater Yellowstone,	Northern Continental Divide, C	Cabinet-Yaak, Bitte	rroot Selway Ecos	systems	Threatened/Endangered Threatened	
Piping Plover Black-Footed Fer Canada Lynx Gray Wolf Grizzly Bea Bull Trout	ret Northeastern Montana Entire region Entire region or Greater Yellowstone, Entire Region	Northern Continental Divide, C		rroot Selway Ecos	systems		
Piping Plover Black-Footed Fer Canada Lynx Gray Wolf Grizzly Bea Bull Trout Pallid Sturgeon	ret Northeastern Montana Entire region Entire region  Greater Yellowstone, Entire Region Fort Peck & Yellowsto			rroot Selway Ecos	systems	Threatened	
Piping Plover Black-Footed Fer Canada Lynx Gray Wolf Grizzly Bea Bull Trout Pallid Sturgeon White Sturgeon	ret Northeastern Montana Entire region Entire region  Greater Yellowstone, Entire Region Fort Peck & Yellowsto Kootenai River	Northern Continental Divide, C		rroot Selway Ecos	systems	Threatened Threatened	
Piping Plover Black-Footed Fer Canada Lynx Gray Wolf Grizzly Bea Bull Trout Pallid Sturgeon	ret Northeastern Montana Entire region Entire region or Greater Yellowstone, Entire Region Fort Peck & Yellowsto Kootenai River Northwestern Montana	Northern Continental Divide, C one River below Powder River a		rroot Selway Ecos	systems	Threatened Threatened Endangered	

2.5 Check an	.5 Check amt of surface area of any emergent vegetation					* * * * * * * * * * * * * * * * * * * *	<b>A</b>		
Type	1-25%	25-50%	50-75%	76-100%			Grasses	<b>A</b> 1	Trees
Sedges			1.			munnum		1 0	11003
Cattails							Cadasa	$\leftarrow$	Photo
Grasses				V	GE		Sedges	. 1	
Rushes					L <sub>E</sub>			ZMZ	Shrubs
Waterlilies							Rushes	2mm2	100
Shrubs							Fence		Assessment Boundary
Trees			7			119-11 (10-11-11-11-11-11-11-11-11-11-11-11-11-1	The second second		Boundary
Other					Please	describe:			

## 2.6 Site Map for Wetland Assessment Area



3.0 Hydrogeomorphology Condition

Degree of hydrologic disturbance (All Wetland Types)	Non Occurring/Slight	Moderate	Severe	
3.1 Degree of wetland surface or subsurface flow patterns that has been "negatively" altered by human disturbance (e.g., roads, buildings, rip rap, levées, bridges approaches, weirs, dams, etc.) "Consider how structures accommodate safe passage of flows (e.g., lower the rating if headcuts are affecting dam or spillway)	. 10	4	0	
3.2 Degree of wetland habitat negatively altered by addition or withdrawal for irrigation, livestock watering, drainage, etc *Consider impacts from any abnormal fluctuating water levels	10	4	. 0	
3.3 Amount of wetland habitat negatively aftered by dredging or filling	10	(4)	0	
3.4 Percent of assessment area and the degree to which the wetland is disturbed by pugging or hummocking from animal hooves  Slight= Pugging is minimal or shallow/Hummocking has occurred/Vegetation and bank stability is intact or recovering Moderate= Pugging is minimal/Hummocks are deep/Vettand is beginning to dry out Severe= Hummocks are deep/ Pugging is common/Vegetation is dead or absent	<=25%  None Occurring 10  Slight 9  Moderate 6  Severe 5	26-75%  Slight 7  Moderate 4  Severe 2	76-100%  Slight 5  Moderate 3  Severe 1	
Hydrogeomorphic Condition Index For hydrologic disturbance take the sum of the lowest	2 scores (3.1-3.4) and divide by		e Index * /	
*For Riverine Sites use average of Riverine and Hydro Please provide comments for any impacts that scores <				

Hydrogeomorphology - Riverine Wetland Addendum (Include only for Riverine Wetlands)

3.5 Riverine -Downcutting/Incisement: Note: The presence of active headcuts should nearly always keep the stream reach from being rated sustainable.	Actual	Potential
Stable Channel	8	8
Evidence of downcutting that is beginning to stabilize	6	6
Small headcuts; channel is in beginning staged of unraveling.	4	4
Unstable channel that is incised and actively widening; banks failure is common	2	2
Deeply incised resembling a gully	0	0
3.6 Riverine - Percent of Stream banks with active Lateral cutting:	Actual	Potential
Lateral bank erosion is in balance with the stream and its setting	8	8
There is a minimal amount of human-induced, active lateral bank erosion occurring, primarily limited to outside banks.	5	5
There is a moderate amount of human-induced active lateral bank erosion on either or both outside or inside banks	3	3
There is extensive human-induced lateral bank erosion occurring on outside and inside banks and straight sections.	0	0
3.7 Riverine - Stream in Balance with Water and Sediment Supply: Note: Rosgen B and naturally occurring D channels are exceptions.	Actual	Potential
No evidence of excessive sediment removal or deposition, or that the stream is getting wider.	6	6
The stream has widened and/or become shallower due to unstable banks or from de-watering. New point bars are often forming with silt and sand common	4	4
The stream tends to be very wide and shallow. Mid channel bars are often present. (See guidebook for prairies streams characteristics)	2	2
The stream has poor sediment transport. The channel is often braided with at least 3 active channels	0	0
3.8 Riverine - Floodplain Characterization: (Rosgen diagrams are available in the handbook)	Actual	Potential
.ittle evidence of floodplain erosion	8	8
Floodplain erosion not extensive	6	6
Considerable evidence of floodplain erosion and occasional headcuts	4	4
rosion and headcuts within the floodplain are extensive. Some human-caused stream bank erosion is occurring	2	2
he floodplain is very limited or does not exist	0	0
8.9 Riverine - Streambank with Vegetation (Kind) having a Deep, Binding Rootmass: (see Appendix for stability ratings for most riparian, and other, species)	Actual	Potential
he streambank vegetative communities are comprised of at least four plant species with deep binding root masses	6	6
The streambank vegetative communities are comprised of at least three plant species with deep binding root masses	4	4
he streambank vegetative communities are comprised of at least two plant species with deep binding root masses	2	2
he streambank vegetative communities are comprised of one or no plant species with deep binding root masses	0	0
3.10 Riverine - Streambank with Vegetation (Amount) having a Deep, Binding Rootmass: (see Appendix for stability ratings for most riparian, and other, species)	Actual	Potential
fore than 85% of the floodplain has vegetation with a stability rating greater than or equal to 6	6	6
5- 85% of the floodplain has vegetation with a stability rating greater than or equal to 6	4	4
5-75% of the floodplain has vegetation with a stability rating greater than or equal to 6	2	2
65% of the floodplain has vegetation with a stability rating greater than or equal to 6	0	0
Please provide comment for any individual score <6:	10,27,30,000,000	
If the potential is not at maximum, please explain:		
Riverine Index: Sum the actual scores (3.5-3.10) and divide by the sum of the potential scores (usually the maximum scores):  Actual: + + + + =		

4.0 Vegetation Condition \*Vegetation should only be assessed within the wetland assessment area

	<u> </u>			
4.1 Bare Ground	None present/ Minimal	Some Present	Gommon Occurrence	Very apparent province and a second
	<=5%	6-15%	16-25%	>25%
How much emergent vegetation is				
impacted by trampling or other	10	8	(4)	0
human-caused disturbance?				, and the second

\*For Noxious and Disturbance Caused Undesirable plants, look to the abundance of harmful species 4.2 Invasive and Disturbance caused Some small patches are Patches are large or Patches are large and undesirable plants None present often present commonly present extensive or Wetland is (Rank 3 most common and check all other <=5% 6-25% Dominated observations) >25% Reed Canary grass 3\_Meadow Foxtail Smooth brome Tall Fescue 10 7 \_Quack grass Timothy 2 Kentucky bluegrass Sweet Clover 2. Creeping Bent grass "Russian Olive 4.3 Noxious Weeds Some small patches are Patches are large or Patches are large and (Rank 3 most common and check all other None present often present commonly present extensive or Wetland is observations) <=5% 6-25% Dominated >25% \_Tamarisk (Salt Cedar) Leafy Spurge \_Canada Thistle \_Purple Loosestrife 10 6 3 0 \_White Top Cress Yellowflag Iris \_Spotted Knapweed Eurasian Milfoil

Is woody vegetation present? Yes No \*Skip the rest of this section if the site does not have the potential for tall shrubs or trees or woody vegetation is not present due to natural causes (not human impacts or removal).

4.4 Woody Species Establishment and Regeneration				<u>n j</u> a ja ja nakanalanii	Actual	Potential
All age classes of desirable woody species present (see Guidebook).					10	10
One age class of desirable woody species is clearly absent, all others well r	6	6				
Two age classes (seedlings and saplings) of native shrubs and/or two age mainly mature species. Other age classes well represented.	.4	4				
Disturbance induced, (i.e., facultative, facultative upland species such as ro consist of decadent/dying individuals	2	2				
A few woody species are present (<10% canopy cover), but herbaceous spensure that it has potential for woody vegetation). OR, the site has at $\geq$ 5%	0	0				
4.5 Utilization of trees and shrubs:						Potential
Few to none of the available second year and older stems are browsed					10	10
Second year and older stems lightly browsed					8	8
Second year and older stems are moderately browsed.					6	6
Second year and older stems are heavily browsed. Many of the shrubs hav	re either a "clubbed	d" growth form, o	they are high-line	ed or umbrella shaped.	2	2
There is noticeable use (10% or more) of unpalatable and normally unused	woody species	***************************************			0	0
4.6 Percent of physical removal of tree/shrub layer or	<=5%	6-25%	26-50%	51-75%		76-100%
dead wood caused by concentrated livestock trampling and rubbing, drying out of site due to stream incisement, human-caused wetland drainage or flooding, etc.	10	8	5	2		0
Please provide comments for any individual scores less than 6:	ekenasayan.			1,444.07.5502	2 (12 (2 (2 (2 (2 (2 (2 (2 (2 (2 (2 (2 (2 (2	econsista de la competicación

If Potential is not at maximum, please explain:

Sum all scores and divide by the total possible for the assessment area. 60 for sites with woody species (shrubs and tree); 30 for sites with only herbaceous vegetation).

Only Herbaceous (4.1-4.3):  $\frac{4}{5} + \frac{5}{5} + \frac{10}{5} = \frac{19}{5}$  /30

For Herbaceous	and wood	ly vegetation :	(4.1- 4.6	i):
----------------	----------	-----------------	-----------	-----

\_\_/10 + \_\_\_\_/10+ \_\_\_\_/10 + actual/potential + actual/potential + \_\_\_\_\_/10 ) /6 =

0.63

5.1 Algae and Duckweed	resent? Yes No *Skip this section if wa  Algae growth is minimal patches  Algae growth in large patches  Algae growth in large patches  4		gae growth in small	Algae growth in large i	patches High	High level of algae growth in continuous	
Large patches means 50%			tcnes	,		mats with odor from rotting vegetation	
			4		0		
5.2 Is Wetland Dominated by Cattails? *Dominated means 70% Do not include any open water component.	Yes 4	N	o <b>10</b>				
5.3 Sediment and Turbidity	a diam'ny a	gyk (fikt) yw it	name a projectiv	er gent in the control of			
5.3a Is there evidence of excessive sediment levels caused by human activities? (e.g. bare ground, row crops, erosion, etc. Do not include trapped sediment due to beaver damming)	10 4 0 ——+—		+	ent and Turbidity Score: /2=			
5.3b is the Water Turbid?	No Turbidity/ Slight 10	Moderat	1.3.	10	10 9 8 7 6 5 4 3 2 0 .		
5.4 Surface oils & foams Do not consider sheen for vegetation decomposition Should be evidence of human caused source)  10  No evidence of surface oils or foams 10  No evidence of toxics or foams 10  No evidence of toxics or foams 10		ace oils Evidence of surface oils or foams		The wetland is covered with surface oils or foams 0  Evidence of toxics. Only tolerant aquatic life are found			
		Evidence of toxics, however aquatic life is abundant and diverse					
5.6 Salinity *Conductivity measurements are not necessary	No evidence of saline seeps Conductivity < 3000 uS/cm 10		os Moderate evidence of saline seeps Conductivity 3000-15000 uS/cm		Conductiv	Significant evidence of saline seeps Conductivity >15000 uS/cm	
5.7 Are saline seeps, fallow croplands, oil brines, or severe overgrazing present within 3 miles?  Yes No Not Sure			3000-13000 B3/CI	5	0 0		
Water Quality Condition Index: Sum the l	owest 2 scores (5.	1-5.6) and	d divide by 20:		20 =		
Please comment on any individual scores < 6:							

6.0 Buffer Condition/ Degree of Stress

Stressors in 100 meter buffer	None present Very few present /Minimal Small Patches	Common Occurrence Large patches within Buffer	Very apparent and extensive Distribution Extensive Large Patches throug	hout entire Buffer
6.1 Amount of bare ground	10	Slope Flat 6 Moderate 4 Steep 3	Slope Flat 4 Moderate 2 Steep 1	Slope Flat= <2 percent grade
6.2 Noxious weeds (Use Montana Noxious Weed Pamphlet)	10	2	0	
6.3 Disturbance- caused undesirable plants	10	(4)	0	Moderate= 2-10 percent Grade
Degree of Stress in Buffer	None Occurring/Slight	Moderate	Severe	
6.4 Grazing intensity in 100 meter buffer	10	Slope Flat 7 Moderate 5 Steep 4	Slope Flat 4 Moderate 2 Steep 1	Steep= >10 percent grade
6.5 Recreational Activities (e.g. campground, fishing access point, etc.)	(10)	<b>Slope</b> Flat 7 Moderate 5 Steep 4	Slope Flat 4 Moderate 2 Steep 1	

8 ope 7 derate 5 dep 4 ope 7 derate 5 dep 4 3 Present 7 7 7 7 m from the Wetland	6 Slope Flat 4 Moderate 2 Steep 1 Slope Flat 5 Moderate 3 Steep 2  2  6  6-25% 4  4  4  4  4  4  4  6? (Please circle)	Stee Slo Flat	2 derate 0 ep 0 ppe 3 derate 1
7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Flat 4 Moderate 2 Steep 1  Slope Flat 5 Moderate 3 Steep 2  2  6  6-25% 4	Flat Mod Stee SIO Flat Mod	2 derate 0 ap 0 oppe 3 derate 1 ap 0 o oppe 0
Present 7 7 7 7 7	Flat 5 Moderate 3 Steep 2  2  6  6-25% 4  4	Flat Mod	3 derate 1 dep 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
9 Present 7 1-5% 7 7	6-25% 4 4		0 >25% 0
Present 7 1-5% 7 7 7	6-25% 4 4 4		> <b>25</b> % 0
7 1-5% 7 7	4 4		0
7 7 7	4 4		0
7	4		0
7	4		
7 m from the Wetlan			0
m from the Wetlan	d? (Please circle)		
	Recreational Activities (e	.g. campground, fishing	access point, etc.)
	Feedlot/concentrated live	estock watering	
	Clear cuts (new growth le	ess than 3 feet tall)	
Riverine Sites)			
> 100 meters	51-100 meters	11-50 meters	<=10 meters
(10)	6	4	2
(10)	8	6	4
10	(4)	2	1
(10)	6	4	2-
10	2	1	(0.)
10	4	2	(11)
	(10) (10) (10) (10) (10)	> 100 meters         51-100 meters           10         6           10         8           10         4           10         6           10         2	>100 meters         51-100 meters         11-50 meters           10         6         4           10         8         6           10         4         2           10         6         4           10         2         1

7.0 Restorability Circle the appropriate category and sub-category and describe how the wetland is trending (when appropriate)

7.1 How	Category A:	Category B:	Category C	Category D:
easily can	No observed impacts;	Some slight impacts that	More significant impacts or disturbances	Serious impacts and stressors
the wetland be restored?	Wetland does not need to be restored.	can be fixed or restored / with minimal expense	within the buffer area that can be removed.  (such as a change in land use practices:	are not economically feasible to remove/restore. (e.g., highway or
		and effort (e.g. adding fencing).	e.g. crop land changed to pasture, cattle tank or abundant noxious weeds) Restoration would require some expense	fixed permanent infrastructure)
7.2 Wetland	Sub-Category 1:	Sub-Category 2:	and effort.  Sub Category 3:	Sub-Category 4:
Trend towards natural	Wetland condition is trending upward.	Wetland condition appears to be stable.	Wetland condition is trending downward.	Wetland condition trend can not be determined
restoration				
Comments:				

7.3 Ra	nk Stressors - Choose from the list and rank all s	starting with 1 (highest)		
7-	Grazing Mining Row Crops Road/Railroad(s) Dam/Dike/Weir Extensive Noxious Weeds	Point Source Contamination Residential Development Human Recreation Industrial Development Forestry/Clear cutting	Oil/Gas Developm Dredging/Filling Feedlot/Cattle Wa De-Watering Hay Meadow	
		Summary of Rating		
Hydrog	geomorphic Condition Index			.0,2
Vegeta	ation Condition Index			0.63
	Quality Condition Index			$\oslash$
Buffer	Condition/ <b>Stressor Score</b>			0.23
If there	on index by 0.2. is no surface water multiply the hydrogeomorpl and Impact Score	entral control of the second o		0.42
Overal	Score calculations:			006
inaex b	is surface water multiply the hydrogeomorphic y 0.2; and the buffer condition/ Stressor index b is no surface water multiply the hydrogeomorphic	y 0.2. Sum the indexes to determine t	the overall condition index so	ore.
Stresso	or index by 0.2; Sum the indexes to determine to	he overall condition index score.	on condition fidex by 0.4; the	e putter condition/
Overa	ill Score			<b>*</b> 0.38
† This can be condit	score is not an indication of wetland imp submitted to Department of Environmention.	eairment status. This form is use ntal Quality for professional revie	d to record observations ow to assist in evaluating	only. The form I wedand
Overall	condition index >0.9-1.0: Excellent Condition	Overall condition index >0	.5-0.7: Fair condition	
Overall	condition index >0.7-0.9: Good Condition	Overall condition index 0	.0-0.5: Poor Condition	

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U.S. Highway 20/26 corridor Preservation	n Study, Wetlands and Waters of the U.S. Report Idaho Transportation Department
	APPENDIX D- Photolog



Photograph 1. Fifteenmile Creek facing Northwest



Photograph 2. Fifteenmile Creek facing South



Photograph 3. Mason Creek facing Northwest



Photograph 4. Mason Creek facing South



Photograph 5 – Wetland Area D (center background)



Photograph 6 – Wetland Area D (Sample plot SP-4)



Photograph 7 – Wetland Area E, photo taken facing southwest towards US 20-26



Photograph 8 – Wetland Area E, photo taken facing west



Photograph 9 – Wetland Area F, photo taken facing northeast



Photograph 10 – Pond 1, photo taken facing west (note feeder canal in lower left foreground)



Photograph 11 – Pond 2, located to left (south) of canal dike photo taken facing northwest



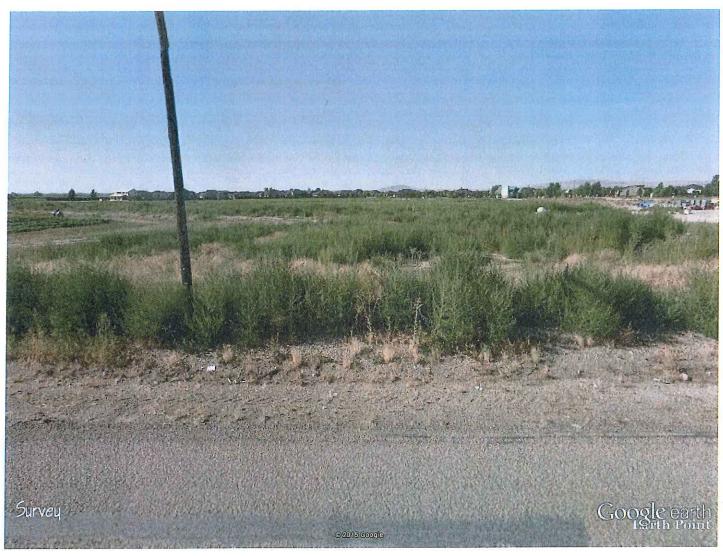
Photograph 12 - Pond 3, photo taken facing south



feet 300 meters 100

POND 2

April 2015



feet meters 2

A

POND 2

June 2015



feet 700 meters 200

A

WETLAND D

April 2015



feet 10 meters 3

V

WETLAND D

June 2015

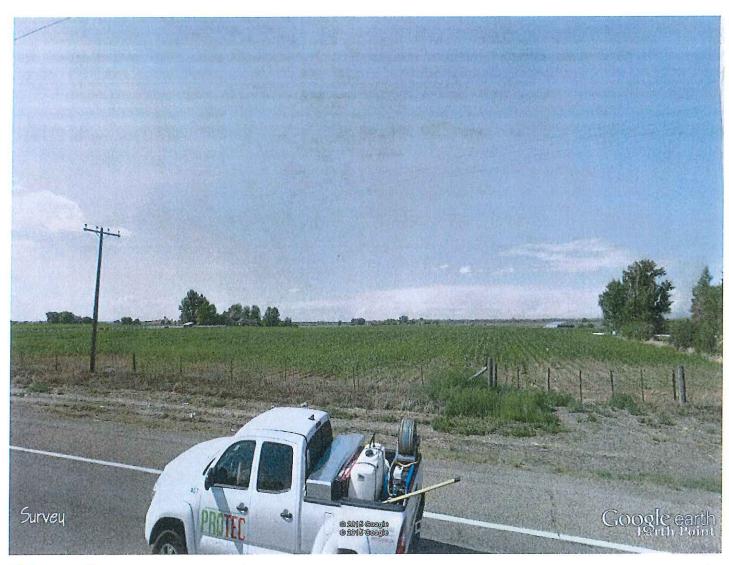


feet 700 meters 200

A

WETLAND E

April 2015



feet 10 meters

4

WETLAND E

June 2015